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Subject: Your Concept Paper regarding Ceara's state Economic Memorandum

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Here are the comments you requested on the Concept Paper regarding Ceará's state economic memorandum. Because I received the memo only last week and just before a trip to Mexico from which I just returned, I have not been able to include all the material and suggestions I had. Please also forgive other errors of style, etc., resulting from the last-minute writeup in time for your meeting and my not proofreading the final document.

The proposed exercise appears to be an excellent idea, and an opportunity for the Bank to play a supportive role to a very serious state government in Northeast Brazil. The paper itself was quite thoughtful and comprehensive.

I have a few reservations certain aspects of the paper's perspective, which in some ways seem rather traditional and limited, and hence may not yield the kind of understandings and pointed policy advice that this kind of exercise could. This memo lists them and makes some suggestions.

1. The proposed exercise seems too comprehensive and "all over the map." A considerable amount of analysis and data are available on Ceará already, including from the World Bank itself, and I am not sure what value-added would be gained from such an all-embracing exercise at this point. This applies to the proposed data analysis as well, which seems like overkill for a state of only seven million people, and given the fact that there are considerable data of this nature already available on Ceará. (Also, my familiarity with the quality of the raw data suggests that it may not merit the degree of quantitative analysis proposed, and time would not allow for cleaning it or starting afresh.)
It is not that the Concept Paper's degree of comprehensiveness and data collection

are not desirable. Rather, some of the papers's questions and proposed data collection exercises would not throw light on certain possible strategies of growth and of poverty reduction that recent research has shown to be quite important--including research sponsored by the Bank itself. Existing studies on the Ceará case and other Northeast states, in turn, provide more than adequate "raw material" to turn the results of this more recent literature into Ceará-specific questions that would lead to results that would seem to add more value than the present form of the exercise--at least in terms of posing strategic choices to the new government.

Given the short period of time available for this exercise, then, casting the net so widely with respect to various sectors and subjects and data collection and analysis involves a costly tradeoff in terms of pursuing other kinds of question that would seem to yield something of greater immediate assistance to the state. This exercise should, rather, build on that existing understanding and data with some more focused and strategic questions--as posed by the state government itself and the Bank. The rest of the memo suggests some of these questions, and explains their importance.

2 **Strengths/Weaknesses.** The paper should include, and also might even start, by naming the strengths/gains of the last 10 years of Tucano government in Ceará, and its weaknesses omissions. To mention a few of the strengths: attraction of outside firms, fiscal reform, administrative reform; the weaknesses: agriculture, drought-relief, education, health [non-preventive]. Why did the state do well in some areas and not others? The task then should be how to identify areas where the strengths could be extended, or modified to better effect--and to identify areas where ground gained is now being lost (the paper actually mentions a few in the fiscal arena), and where new directions might be merited; and the reason for the weaknesses analyzed, with proposed ways of redressing them. In education, for example, time spent in the report's proposed data-collection exercise would yield a more nuanced picture of what is already know about what produces Ceará's poor results in education. What is needed, rather, is an understanding of the dynamics of what keeps the state from paying more attention to education, and in an effective way.

3. **Agriculture.** The paper is strangely dismissive, or at least silent, on possibilities for growth stemming from the agricultural and nonfarm rural economy. The paper itself shows that, although agriculture represents only 6% of the state's GNP, it occupies 43% of the state's labor force works in agriculture, not to mention the significant additional percentage that works in rural nonfarm activities. At least as significant, 51% of the state's exports abroad come from rurally-located activities--agriculture or natural resources--with such products representing the state's first and fourth most important exports--cashew (40%), carnauba wax (11%); poultry, also, has been one of the most dynamic rural industries in Ceará today.

Just as significant, a significant share of the state's GDP, and at least 24% of its exports abroad come from manufactured goods. Food processing alone is the most significant

economic activity of the state in terms of output and employment. With respect to exports abroad, as the Paper shows, at least 24% come from manufactured goods whose inputs come from agriculture--cloth (12%), cotton and synthetic fiber (9%), and shoes (3%), not to mention garments and food processing. Cotton, livestock, leather hides, and food crops are basic inputs to these products.

Although Ceará has traditionally produced these inputs, it has done so inefficiently, without well thought-out and executed state support. Hence the recently dynamic manufacturing industries like textiles and shoes have increasingly bought their basic input from outside the state and the country, given the low productivity of and lack of dynamism in the input-producing sectors. (More on this below.)

The long tradition of manufacturing in these areas, and their new dynamism over the last decade or so, should put on the policy agenda the question of how and whether to improve productivity in these sectors. The tendency to dismiss agriculture as stagnant, backward, and drought-ridden--not where growth possibilities are "at"--and to point to the decreasing share of agriculture in the state's GDP in contrast to the rising share of industry as one piece of the evidence, misses the extent to which this is a function of the inadequacy of state policy in this area--in stark contrast to its successes on the manufacturing side. After all, a declining and ultimate low share of agriculture has characterized the history of all industrializing countries, including those in which agriculture was or became dynamic rather than stagnant. In and of itself, then, such a decline does not represent case for not paying attention to a sector that, in addition, employs almost half the state's labor force.

Clearly, the decline of agriculture in Ceará is also linked to the decimation of cotton production in that state, as a result of the twin attack by the boll weevil and declining international prices in the 1980s. But these kinds of problems are generic to agriculture--agriculturally dynamic regions and countries are notable for their ability to respond to crises--epidemics of pests and disease, price declines in the international market, and the arrival of new competitor countries.

Two examples of agricultural interests and state action together rising to such crisis are a similar epidemic of the cotton boll weevil in the U.S. South,--the response to which is credited with giving birth to an outstanding system of agricultural extension. More recently and closer to Ceará, the inability of commercial fruit growers in Petrolina-Juazeiro to export to the United States because of the lack of fruit-fly control was the impetus for the buildup of a remarkable public/private partnership, which monitored for pests and improved the quality of the product. The initiative and intermediation of the parastatal CODEVASF, and the Ministry of Agriculture represented key strategic assists in this response.

In brief, then, it was not simply the weevil, international prices, and a low-productivity system of production that undid cotton, but the absence of a leadership role played by the state in addressing the problem, and in fostering the development of public-private cooperation in this area. If the Tucano governments of Ceará had put as much energy,

expertise, and interest into agriculture as they did into trying to make manufacturing dynamic--mainly by attracting outside firms to the state--agriculture and the rural nonfarm economy would probably look quite different. (The state has started to make some progress in introducing boll-weevil-resistant cotton, a development that should be assessed in the proposed exercise.)

Today's context for the state's doing something in agriculture is considerably more conducive than it was earlier, which makes the subject particularly apt for the proposed exercise. Before explaining why, I briefly list the reasons for this lapse of policy in such a traditionally agricultural state:

First, the separation of agricultural matters into agriculture-specific state departments and agencies, and industry into another, deprived agriculture of the benefits of a public/private partnership that would have channeled significant backward-linkage pressures from the agricultural-input-using industries (more on this below). As in other states and countries, including previous Bank approaches to agriculture, much of agricultural policy and programs are supply-driven, even though history and many case studies show the importance of demand-driven pressures and collaborations with supplier firms in agricultural productivity. In Ceará, the innovative case of the milk processor Betânia (with respect to the innovative small-farmer dairy cattle "franchise" arrangements) is an example (now extinct, with the purchase of Betânia by the multinational Parmalat). In the earlier phase of Petrolina-Juazeiro's development, the role of tomato-processing firms in improving small-farm agriculture is another example.

Keeping agriculture and industry separate, then, deprives agriculture of these potential pressures from customers on suppliers. Obviously, it is not practical to merge these state departments, so that a key role falls to the state government to bridge this gap in a way that links the consuming industries interests to the development of agriculture.

A second and additional reason for the dismissing of agriculture in Ceará is a sustained standoff of the state government with its agricultural extension service, which sued the state for in the labor courts for layoffs and salary issues carried out under the administrative reform. This has tended to cause the government's leadership to throw out the baby with the bathwater--namely, to dismiss state-level agricultural extension as unnecessary, despite evidence to the contrary from history, both recent and less recent. It would be useful if the proposed exercise could assess this current state of this standoff, and to propose next steps that would build on lessons learned from positive experiences with extension in the state (or others). There is considerable understanding available now of what it would take to make extension more effective. It simply has not been put into practice.

A third reason for the neglect of agriculture is the tendency of the state to see the rural sector as posing the challenge of alleviation of poverty and unemployment, rather than of economic growth. This has resulted in, instead of attention to agriculture, three other approaches or ways of thinking about the rural sector: (i) a focus on poverty-alleviation programs rather than agricultural-productivity-increasing programs focused

on a diversified mix of small, medium, and large farmers (as occurred in Petrolina-Juazeiro, for example); (ii) the emphasis on luring large manufacturing firms from outside the state to locate in agricultural areas, employing workers without experience in industrial work; (iii) a belief in the large "anchor firm" ("empresa âncora") as the solution to the agricultural growth problem. (Not much has happened yet in the latter area, though the fact that state leadership believes that this is the correct approach pre-empts it from thinking in the other terms; the large-anchor-firm approach is taken up further below.)

None of these approaches takes advantage of what has been learned about rural growth linkages, and the dynamism of growth pressures from agriculture into the rural nonfarm economy, and how policy can enhance them. (More on this below.) Rural poverty-alleviation programs, moreover, are much more subject to use for patronage purposes aimed at electoral ends than are agricultural-support programs; this is probably one of the reasons why they have received more political support. (More on this below.)

4. **Bottleneck identification and backward linkage dynamics**. The existence of a critical mass of dynamic firms in today's Ceará for which agriculture supplies a major input (textiles, leather shoes, food processors, etc.) creates clear and new potential economic returns to the state to improving the productivity of these input-supplying sectors--and clear costs in competitiveness to *not* doing so. The existence of this newly critical mass of industries could provide significant business support--in terms of backward-linkage pressures not previously existing--for improving the productivity of these inputs. Indeed, the shoe-industry association in Ceará exerted exactly this kind of pressure on state government with respect to the tanning and, ultimately, the livestock industry in Ceará.

The low quality of Ceará's hides are a result of problems with the production of the cattle and the low-capital investment of tanning firms. As a result, tanneries have exported most of Ceará's hides in semi-finished form ("wet-blue") to the South or abroad for finishing, and the leather-shoe industry must import its hides from the South. The leather-shoe industry of Ceará therefore pressured the state, unsuccessfully, to prohibit the export of the hides in this semi-finished form. Although this pressure was unsuccessful, and this particular measure might have simply driven out the tanning (and hide-supplying) industry rather than improving its productivity, the point is that there was a role for a state-government intermediation here that did not materialize. Identifying this kind of bottleneck here and in other areas (as in fiber or textiles vis-a-vis cotton), would be a valuable contribution of the exercise proposed in the concept paper.

This kind of reasoning, actually, would not at all be new for state government. Indeed, the Tucano governments have more recently engaged in a variation on this kind of bottleneck-identifying activity with remarkable astuteness in the garment and shoe sectors, and then acted upon it. In garments, it lobbied hard (and successfully) to get a

large multinational zipper firm to locate in the state--the nearness of zipper production to jeans producers in particular being very important to product quality and competitiveness (jeans buyers will not buy a product with a faulty zipper, in contrast to other garments). With respect to shoes, the state government is vigorously courting two large shoe exporters headquartered in Rio Grande do Sul, who channel most of that shoe cluster's exports out of the country. The state is trying to get them to move to Ceará, now that many of that state's firms have set up operations in Ceará (also a result, in part, of the state's vigorous promotion).

The stories of the shoe-intermediaries and zipper producer are similar to the cotton and livestock/tannery examples in that they deal with bottleneck-identification by the state government. They are different in one significant way, however, with respect to state-government policy. With shoe-brokerage and zippers, the state's response to identifying the bottleneck was to go outside the state and lure particular firms to locate there. But the response required in the cotton and tannery/livestock case requires something else, perhaps of more ongoing nature--working together *within* the state, and with local business communities, on a low-productivity problem affecting.

All this suggests the state's playing a key role, at the margin, in drawing on and supporting the formation of sectoral associations, many of which already exist in some form. Although this may seem more complex and costly than luring in individual firms from outside the state, this is not necessarily the case. The state may simply need to bring its political and convening power to bear in local customer firms or their associations to sit down at the table with the input-supplying producers or associations. It may need to assist this process with what is necessary in terms of expertise, training, infrastructure investments, and/or credit.

Again, this may seem a return to allegedly "old models" of industrial policy, but it actually does not represent something new or additional. Ceará is doing all these things aggressively and effectively with the outside firms it has lured to the state (in addition to significant VAT tax [17%] exemptions for periods of 10 years and more). The difference here, again, is that a more sustained and collective public/private and institutional dedication to the problem is required than that of wooing individual firms and giving them one-shot supports.

The first Tucano government (1987-1990) actually initiated something of this nature, which continued into the second Tucano government--monthly breakfasts convened by the Secretary of Planning with mainly business groups, which the governor often attended (at least in the beginning) and the creation of sectoral groups to work on just these kinds of problems. Though this effort (O Pacto) was touted by the government as a new example of public-private cooperation, it may not have produced any sustained results for the sectors discussed here, though it may have done so in other areas. The Economic Memorandum exercise might assess the results of this experience in other sectors, and to assess their relevance for application elsewhere.

For a state concerned so much with competing in international markets and in

Southeastern Brazil, the economic and firm costs of buying inputs abroad or from the South for industries like food, cloth, and shoe, in which there has been a tradition of local production, are significant. This costs represent not only the increased costs of transport, but also the cost to these firms of maintaining significantly larger inventories than they would have to if inputs were closer by. This, in turn, also keeps Ceará's firms from moving as much in the direction of Just-in-Time production methods as they might.

In addition, and because many Ceará firms in these sectors are very minor customers of the South and Southeastern Brazil input firms they buy from, they do not receive the attention and priority that larger Southeastern customers do. So they cannot develop the reliable and trusting customer-supplier relations that are so central to improved productivity today--the kind of relationships that would enable them to count on guaranteed delivery times, amounts, and quality. This also exacerbates the costs of buying inputs from afar, keeping firms from adopting more modern and cost-reducing practices, particularly with respect to inventory and the use of raw materials.

In the short run, the costs to the yarn, cloth, shoe (and other?) firms of importing inputs have not translated into action by sector associations, or expression of concern (with some exceptions, as illustrated below). This is due, in part, to certain factors of a temporary nature over the last few years, which have combined to reduce artifically the cost of inputs imported from outside Brazil--mainly, the overvaluation of the Real, high domestic interest rates for supplier credit and, in contrast, special interest-free facilities for supplier credit for importing. (The latter has now been compensated for, I believe, with similar credit facilities for the purchase of domestic inputs.)

I return to the subject matter of this section in the last section.

5. **Non-tradeables.** In contrast to the attention paid to manufacturing in the section on economic growth, and even to agriculture, the Concept Paper is somewhat silent on the issue of nontradeables (except for tourism). Yet the paper shows that services account for more than two times the contribution of manufacturing to Ceará's GDP (67% vs. 27%), let alone three times the contribution of manufacturing to employment (43% vs. 14%).

The neglect of services as a source of economic growth (let alone employment) here and elsewhere, stems partly from looking at service-sector growth as a sign of malaise (low-wage, low-productivity informal-sector activities) rather than of economic health. This is partly true, but service-sector growth can reflect dynamic activities too. It is important for the proposed exercise to make these distinctions, since successful industrialized and industrializing countries show this same increase in services, many of which are signs of health rather than malaise. Rural growth-linkage studies, moreover, show that service-sector jobs in rural towns are a distinct step up from agriculture.

The silence on services in rural areas also stems from the overweening emphasis placed on exports these days. But this silence against the importance attributed to nontradeables in the literature on *sustained* local economic development, including employment (key in poverty reduction). It is not only Paul Krugman's recent works, which argue a misplaced emphasis on trade in large economies like the U.S. and Brazil, to the neglect of the domestic market and nontradeables. In addition, in the development field, two decades of careful survey research on economic development, much of it sponsored by the World Bank and IFPRI, has shown the importance of nonfarm rural activities in local development--the so-called rural growth linkages literature, and its current successor, the studies of the rural nonfarm economy.

Briefly, these studies show that income generated by agricultural growth generates additional indirect income of somewhat less than the same amount (about 70% more) through consumption linkages (spending by those with increased incomes) for products and, particularly, services provided in rural areas. Studies of countries and states that have experienced such linked growth in nontradeable services, as well as rural manufactured goods, show that their governments have given an important assist with policy. Taiwan is one of the cases usually referred to as an example of intelligent policies in this area.

6. **Poverty Alleviation.** The Concept Paper would seem to place too much of the burden of poverty alleviation on poverty-specific strategies as opposed to economic growth strategies that create employment. It neglects opportunities for more inclusive, diversified economic growth strategies--examples of which abound in the literature of the East Asian tigers, the rural growth linkages literature, the new literature of regional economic development, agglomerations, inter-firm linkages and associations, and embedded relations between government, business, labor, and civil society. Northeast Brazil itself, moreover, provides its own examples of these kinds of the key role of these kinds of variables in bringing about sustained, inclusive, and embedded economic growth. Garments in Fortaleza vs. shoes in Sobral, shoes in Paraíba vs. shoes in Ceará (see below), export successes (and linked regional development) in irrigated grapes and mangos in Petrolina-Juazeiro--to name a few.
Much of the research on these variables, and the country and regional case studies, has come out of the Bank itself. The Economic Memorandum exercise should try to ferret out such opportunities in Ceará, many of which are relatively clear (see below for one or two of several possible examples). Again, it would seem that the proposed data-collecting exercises would not really help to identify these opportunities--all of which have to do with identifying bottlenecks, strategic opportunities, marginal interventions, existing institutions and associations of firms showing capabilities in these areas, etc.

As the Concept Paper itself points out, moreover, at least some of the poverty-alleviation approaches named by the paper are particularly subject to weakness and malfeasance because of their suitability for the dispensing of patronage for electoral purposes, given the distributive nature of these programs--mainly, participatory rural

poverty-alleviation projects and other "social action" programs. Though these programs may be successful in bringing certain important changes in rural areas, they do not address the growth-strategy issues laid out here, nor is it clear how sustained these gains will be after the programs end.

With respect to modernizing governments like Ceará's and the reduction of clientelism, one of the government's proud claims, new evidence is now appearing that modernizing governments tend to lose urban voters because of the unpopularity of some of their reforms and, to compensate, have to woo rural voters with traditional patronage practices. Gibbons wrote about this most convincingly, for Mexico and Argentina. Another variation on that theme was offered in a study of Bahia by Celina Souza, who showed the distinct "dual-personality" nature of governance in that state and, particularly, its capital city--modernizing in areas of economic development, and clientelistic--in her case--in the "social" sectors of education and health.

These findings are important for thinking about policy in the proposed exercise for three reasons. First, clientelism can actually be an integral (or even increasing) practice of modernizing governments like Ceará's, in contrast to the usual assumption and rhetoric of a linear reduction of clientelism as modernizing governments succeed in their reforms. Second, because of the unpopularity of some of the reforms undertaken by modernizing governments like Ceará's, sustained or even increased patronage may be integral to the *political* survival of such governments--i.e., their ability to get things through their own legislatures, and to win subsequent elections. Third, as patronage opportunities decrease in the reformed part (e.g., the reduction of ghost workers, etc., in Fortaleza), this creates a distinct compensating need to exercise political patronage--or increase it--through other venues.

It is remarkable how applicable this analysis is to Ceará: the state government's increasing difficulty in winning elections in the capital city, and the increasing evidence and complaints more recently about the use of its poverty-alleviation programs for patronage and electoral purposes--complaints not only from outsiders and those who left government, but from insiders.

The point of this is not to chastise the current government, or to say that policy attention should be focused on de-clientelizing the poverty-alleviation programs. Rather, the patronage aspects of rural poverty-alleviating programs are too central to the politics of maintaining modernizing governments to place that much responsibility on them. More importantly, there are clear opportunities for reducing poverty through choices of economic growth strategies that would seem to be a better bet. Examples above and below.

7. **Labor, employment, training, and education.** Again with respect to poverty alleviation, the paper does not say much about labor, employment, training, and education beyond naming them. Given the recent emphasis on this in the literature and WB policy statements on poverty alleviation, these areas would seem to be

among the first to be tackled by such a policy-identifying exercise, with respect to both poverty alleviation *and* economic growth strategies. The Concept Paper briefly mentions a concern about "labor market rigidities and failures of labor intermediation that unnecessarily increase labor costs and depress employment." This seems to represent the traditional view, expressed in various Bank reports and other studies, that worries about the effect on competitiveness and employment of anything that pushes wages up--namely, union organizing, fringe benefits, inflexible labor regulations.

Ceará's policies have been quite consistent with this view, at least with respect to its luring of outside firms. Among the Northeast states, Ceará in particular has the most aggressively and explicitly cheap-labor, low-road approach to economic development and labor. The policies, practices, and rhetoric are remarkably similar to those of the U.S. Southern states from the 1920s to the 1950s. The state's officials proudly state that they will compete on the world market by "making a little China of Ceará."

With respect to labor, Ceará has sold itself to outside firms on the basis of cheap labor, offered fiscal incentives to encourage firms to locate in depressed agricultural regions where wages are much lower, and promised firms to help reduce their labor costs significantly by suggesting that they decentralize production to "labor cooperatives"--a novel form of production organization in the state. The state has assisted outside firms locating there to do this by, among other things, sponsoring legislation in the state assembly that paved the way, and by financing the training of these workers out of training funds available through the FAT (Fundo de Amparo ao Trabalhador).

Contracting workers through labor cooperatives, rather than employing them directly, liberates these firms--mainly in the garment and shoe sectors--from paying fringe benefits, and observing other aspects of the labor, health, and safety legislation. With respect to fringe benefits in particular, this represents a significant cost reduction, since fringe benefits add from 50% to 100% of wage costs (depending on how fringe benefits are calculated--see WB Custo Brasil report).

The labor cooperatives have elicited much criticism of Ceará as exploitative and a regression from more "civilized" and "modern" labor practices and protections--criticism from various sources such as the press, researchers, the Ministry of Labor, and local firms. I imagine that by now there has been some adjustment; moreover, the labor cooperatives seem to be limited to the garment and shoe sectors (albeit accounting for a significant share of the firms attracted to the state recently), and not all the outside garment and shoe firms use this decentralized form of production.

The point of bringing the subject of the state's cheap-labor approach to competing in manufactures is not to criticize it or ignore the importance of flexibilization of labor practices for today's globalized world. But this approach, and the larger view of how to think about labor flexibilization expressed in Ceará's approaches and implied in the Concept Paper, actually conflicts with findings from some of the Bank's own more recent research, as well as findings from the larger literature on globalization, much of

it from business schools. An important role of the Economic Memorandum exercise should be to open the state's eyes to the importance of these other approaches to reducing costs and becoming competitive, and the possible myopia of the present approach.

Briefly, that is, the cheap-labor emphasis, and its justification in the kind of rationale that the Concept Paper states, may represent an unrealistic assessment of Ceará's competitive possibilities in the international (and import-competing) market in a trade-liberalized world. This emphasis also distracts attention from the importance of other approaches to competing and to reducing costs, which various studies (including some sponsored by the Bank itself) have shown to present greater opportunities than the area of labor costs for competing and reducing costs--and that signify more than do labor costs in keeping places like Ceará from being competitive. To name of few of these findings:

(1) The Bank's Custo Brasil study shows that the focus on keeping labor costs down may be misplaced, in relation to other problems that contribute more significantly to reduced competitiveness, some of which are subject to correction by policy. In particular, the study finds infrastructure (particularly transport) to be a more significant deterrent to competitiveness in Brazil than labor costs. But, importantly, it is not the *cost* of highway transport, which Ceará depends on for much of its inputs, that is the problem. Brazil's truck transport industry actually turns out to be quite competitive, but the problem lies in the fact that the lack of efficient coastal, riverine, and rail transport causes goods to be transported by road that are in other countries transported by the less costly modes of rail or water. These findings are certainly of relevance to the proposed exercise.

(2) The McKinsey study of Brazil's competitiveness in world markets does not show Brazil's labor costs to be out of line.

(3) Equally relevant findings for Ceará are to be found in the Bank-sponsored research carried out by Ashoka Mody and associates--with respect to the competitiveness gains to be made in developing countries, particularly those in the "light" industries that characterize Ceará. From cross-country studies and careful econometric work, Mody and his associates find that competitiveness and productivity-enhancing gains to be made by reducing labor costs are swamped by those to be made from reducing inventories and wastage of raw materials, and re-organizing shopfloor production. Indeed, the shoe industry, whose new dynamism in Ceará is pointed to proudly by the government as a striking success story resulting from its aggressive industrial promotion policies, is the prototypical model used by Mody to illustrate his econometric findings in this area.

Since Ceará has less control over the costs of infrastructure outside its borders than it does the production of certain inputs used by its dynamic industries--inputs that are traditional to its economy--it would seem that the Bank's proposed exercise would try to zero in on these particular bottlenecks, since the return to reducing them is very high

and, in many cases, may require support and intervention that represents a relatively marginal effort.

(4) The research and econometric studies of Adrian Wood and others for Latin America suggests that, for such natural-resource-based developmental regions like Latin America (and Africa) the rules of the development game have been substantially changed with globalization and the entrance of China and South Asia into the world market in the 1990s. Following the sequence of development of the East Asian tigers--from cheap-labor to up-market products later--is no longer an option, given Latin America's considerably higher relative wage levels, even in poor regions like the Northeast. These conclusions suggest that it is unrealistic and imprudent to compete on the basis of cheap labor, unless countries are willing to reinstate tariff protection. (My conversations with major U.S. importers of Brazilian shoes seem to echo this.)

These studies suggest, in sum, that Latin America's choices are hence increasingly limited in that it cannot compete on the grounds of cheap labor costs, and has to look "upmarket"--reaching toward competition at the mid-level of sophistication and product quality--at least with respect to tradeables.

(5) Competing on the grounds of quality rather than reduced (labor) cost in labor-intensive goods--is sometimes referred to as the "high road" as vs. "the low road" to reducing costs and competing. Improving product quality, that is, requires upskilling of labor, training, and more broadly based education in problem-solving that is not firm or sector-specific--what the public and primary education system should provide. It requires more management-labor cooperation, because management is more dependent on workers for understanding problems that reduce quality and making suggestions on how to correct them.

(6) The literature on training workers shows that whereas large firms tend to themselves invest in training in the absence of public-sector training, medium and small firms (SMEs) do not. This is partly because of economies of scale in training, and partly because SMEs fear that the trained workers they invested in will soon leave and start their own firms. These facts describe the reasons for market failure with respect to training workers for SMEs, as distinct from large firms, and a role therefore a key role for the public sector in today's world for providing training to workers for SMEs in particular. In that most of Ceará's training subsidies support training for large firms lured from outside, as compared to local firms and SMEs, this seems to be economically perverse. This suggests an important area for the Economic Memorandum to explore, given the much greater net economic returns to be had from a public-sector role in training workers for SMEs rather than large ones.
(7) Finally, experiences in various countries show that labor organizing, collective bargaining agreements that raise wages, and related improved enforcement of health and safety regulations will in some circumstances increase the possibilities for improved competitiveness in today's globalized markets and emphasis on improved quality, and not necessarily always hinder them. Two notable Northeast-Brazil examples come from where one would least expect them--not from industry, but from

agriculture, and from the poorest, lowest-wage area of the Northeast--the semi-arid sertão.

In Petrolina-Juazeiro, rural labor unions pressed for and ultimately achieved from commercial grower/exporters of irrigated fruit an accord that paid them not just the minimum wage, but 10% above it--as well as improving various working conditions relating to transport, housing, sanitary facilities, and committing to respect child-labor accords. Remarkably, this was achieved without violence or protracted conflict. In explaining employer acceptance of these changes, growers cited the importance of fruit quality for competing in European and U.S. consumer markets, and their consequent need for trained labor and, hence, their perpetual worries about maintaining a permanent labor force. It was difficult to get workers to stay after training them for several weeks, and to get their cooperation in striving constantly to improve quality, without agreeing to their requests for a labor accord.

In the Mossoró-Açu region of Rio Grande do Norte, on Ceara's border, a more recent and similar accord took place--driven mainly by the region's recent success in exporting melons to U.S. and European markets. In the Mossoró-Açu case, the fruit-exporting story started two or three large pioneering firms--in contrast to the multitude of medium commercial growers in Petrolina-Juazeiro. The name of the largest pioneer firm, Maísa, is legendary as a model in Ceará's thinking about the "right model" for agricultural development--the large "anchor firm."

Although the labor accords were also not accompanied by violence in Rio Grande do Norte, they had a distinct impact on the structure of production, in contrast to Petrolina-Juazeiro. The labor accords, together with the possibly more important end to the era of highly subsidized credit and venture capital for these large operators, forced them to decentralize some of their production to small farmers, through subcontracting or simply marketing agreements. This is an alternative approach to Petrolina-Juazeiro's way of achieving improved quality because, as the larger Mossoró-Açu growers themselves said, small family farmers will exploit themselves and their family to improve quality.

This outcome, in addition to other evidence unrelated to the labor issue, suggests that the large Mossoró-Açu firms had actually expanded production beyond the economically efficient scale, and moved into the realm of the diseconomies of scale encountered in irrigated fruit production for export to demanding consumer markets. (Some large and even medium growers actually said this themselves--that the "ideal" number of hectares for cultivation was less than they had been accustomed to plant.) In Petrolina-Juazeiro, in contrast, this decentralization of production did not occur in response to the labor accords, and competitiveness did not suffer, probably because the commercial exporting firms had always been medium rather than large.

The labor accords in Mossoró-Açu, then, actually contributed to pushing the production system back from a less efficient (larger-size area farmed) to a more efficient scale of producing these particular high-quality fruit exports under these

particular conditions. It is interesting, in this regard, that the large firms had previously pressured public agencies successfully to not supply inputs and services, particularly credit, to smaller and medium firms--whose competition they feared. Far from being an "efficient" model for developing agriculture, then, the "anchor firms" of the melon story were actually inefficient--having expanded beyond the economically desirable size of production, as stimulated mainly by lavish capital and credit subsidies. Finally, and interestingly, the melon region of Mossoró-Açu borders Ceará, and Maísa's properties actually straddle that border--though they are not all contiguous.

Ceará's agricultural labor organizations, for various historical and political reasons, have less strength than those of Rio Grande do Norte (or, as many say, the environment for rural labor organizing is more repressive in Ceará than in Rio Grande do Norte). Those producing melons in Ceará (less important than RN production), then, do not have to pay the wages and observe the other strictures that commercial growers in Rio Grande do Norte do. Indeed, Maísa itself pays its RN workers more than the same workers across the border line in Ceará producing melons on the same quality land.

This seems to be a perfect test case for the assertion (or, more accurately, hypothesis) that labor organizing and administered increases in wages and mandated working conditions necessarily reduce the ability to compete. These results, that is, do not bear out the hypothesis. Melon production is not moving from RN to Ceará, even though the labor accords were first negotiated in the early 1990s (and even though the M-A region of RN is equidistant from the ports of Fortaleza in Ceará and Natal in Rio Grande do Norte).

Actually, given the importance of agricultural employment in Ceará and the tendency to neglect agricultural development opportunities noted above, one wonders why the striking success story of melon exports to European and U.S. markets did not *start* in Ceará, or at least spill over into it. This poses interesting questions with respect to Ceará policy, given that the melon area of Rio Grande do Norte juts up against the Ceará border, and the lands of the large pioneering firm Maísa actually straddle the border. Maísa, moreover, is a Cearense firm, as opposed to the two other large ones, which are based in Rio Grande do Norte.

The recent findings of the economic and business literature on competing through product quality, then, are of more relevance to this story than those on competing through cheap labor. This is not surprising, by the way, if one computes the significantly higher costs of transport, packing, and brokerage commissions when one sells fruit on international vs. domestic markets. Despite the fact that fruit production is labor-intensive, labor costs are dwarfed in relation to these other costs--as shown by a recent EMBRAPA study.

These cases, then, also illustrate the fact that the emphasis on cheap labor, and on the threat to employment and competitiveness from collective labor agreements and labor organizing, is somewhat distracting of policy attention from other areas where it could

have significant impact at the margin in increasing competitiveness through cost reduction and enhanced product quality.

Though these two stories are considerably more complex than the details rendered above, this brief summary provides suggests a line of information-gathering and analysis would be fruitful for the proposed exercise to pursue in this and other sectors.

8. **Conclusion: return to bottlenecks, linkages, and supply chains.** To draw attention to the opportunities and areas outlined in this memo, and to propose state-government intermediation, is not to propose something totally new or foreign for Ceará. To the contrary, the state's leadership, particularly the governor and the industry-promoting departments, speak very much in the language of supply chains, public-private partnerships, the importance of trusting customer-supplier relationships, clusters, etc. What I am simply suggesting, then, is not so different from the way the state government thinks now, and would simply help the state to do better in this area, and learn some lessons from its own experience as well as that of other countries. One will find a highly sympathetic and understanding audience for this kind of thinking.

The state still has a way to go in understanding how to do the institutional part--to understand the role of industry associations, and the ways that the state can support and work with them--nudging them beyond their traditional lobbying of government for exemptions from taxes and other favors in the direction of analyzing their of productivity and bottleneck problems and asking for key assists and expertise in these areas where needed.

Finally, though the language of "clusters" and externalities is also quite common now in Fortaleza, the appreciation for the externalities gained by agglomeration and associationalism (or looser forms of interaction) among nearby firms does not seem to be reflected in the state's policies in some of the sectors. The state gives great priority, for example, to its policy of "interiorization"--namely, offering higher fiscal and other incentives to outside firms willing to locate in the interior, usually in towns with no firms of a similar nature, and often where there is labor force with work experience in manufacturing or anything else outside agriculture. (Many such firm owners or managers say they prefer this kind of "virgin" labor force, at least in the footloose industries of garments and shoes.) With respect to local firms and credit, the state (or BNB only?) seems to look more favorably upon firms (in Fortaleza) that want credit to open a new plant in (or move to) the interior--as opposed to those who want to expand production or renew equipment in their existing location.

These attitudes and policies are based on a clear desire to bring employment to the interior. The Concept Paper's data on increased employment figures suggest some clear advances in this area. (They are also based, as both firms and government officials say, on a desire to avoid location of firms nearby each other or clustering in general in that this would facilitate organizing by labor, and would cause firms to compete with each other to bid up labor costs.) The result is, as expressly aimed for

by state policy, that several small or medium towns (or totally non-urban areas)--at considerable distance from each other--each receive one plant. Not insignificantly, these are usually in the footloose industries of garments and shoes, which tend to leave for other places as soon as they can produce more cheaply elsewhere, and/or when international markets and imports from abroad change such that production elsewhere is more desirable.

Although in the short-term these interior-located firms represent distinct gains in employment, it is not clear whether anything will be left behind when these firms leave. There is quite an experience and learning of lessons on this issue in other places. Since the 1920s, for example, the U.S. South has had a long experience with luring outside firms to locate there, and a long history of lesson-learning about it--especially during the period when these firms left for other places, leaving hundreds unemployed in small communities that had no other significant source of economic activity.

The U.S. Southern experience with attracting large outside firms took place under remarkably similar circumstances to that of Northeast Brazil--a chronically underdeveloped region vigorously courting outside firms from the more developed region (the U.S. Northeast), and in the traditional light industries--textiles, shoes, garments, furniture. The two regions' efforts in this area, though half a century apart, involved remarkably similar policies, justifications, and rhetoric. Most important for the purposes of the proposed exercise, the U.S. Southern started half a century earlier than Ceará's, so that many policy lessons have been learned, aired, and applied.

Ceará state officials, including the governor, respond to the concern about locating firms in isolated rural towns by saying that what they are doing "is better than nothing." Although their policy may indeed yield good results, it is clear from the recent literature on experiences in other countries and in Brazil itself that the only alternative is *not* "nothing." These other approaches is what the Concept Paper exercise should be exploring in Ceará.

One such alternative can be illustrated by Ceará's neighboring state of Paraíba. Though it has half the population of Ceará, its shoe and shoe-export output is roughly the same as Ceará's--even though it is much less known among Northeast watchers than that of Ceará. In Paraíba, where the history of the shoe industry is a longer one, a few large firms have already left for other places. But in contrast to the more recent case of dynamism in Ceará's shoe sector, they came into an institutionally richer, more supportive, and spatially agglomerated environment than that of Ceará's, and were located near existing, mainly smaller medium and small firms.

Paraíba's small local shoe firms, then, benefited from the externalities of the location of these firms in their midst--in both spatial and institutional terms--so that when they left, the existing local firms and institutions carried on. Indeed, in some ways the local industry actually flourished when the one or two large firms left. The hundreds of workers laid off by the exiting firms were either snapped up by nearby local shoe producers firms as highly desirable employees, or themselves started new firms. This

may well not happen in a situation where state policy encourages firm location that, while perhaps stimulating rural employment in the short run, isolates firms rather than bringing them together and, thereby, creating a dynamic that allows local firms to benefit from their proximity. The "interiorization" policy, then, may forego the beneficial effects of agglomeration and hence of a more rooted, and sustained local development.

Another contrasting case with respect to isolation vs. agglomeration, this time from Ceará itself, comes from the garment industry--which is more analogous to the story of Paraíba's shoe-industry, though the institutional history is nowhere as rich. Several of Ceará's earlier-locating large garment firms situated themselves in Fortaleza itself, spatially proximate--as in Paraíba, to existing medium and small-sized local firms. This resulted in clear agglomeration benefits for the local firms, including the recent arrival of the large zipper firm to their midst and beneficial supplier-to-customer training effects. This outcome was in part a result of state policy, and in other ways inadvertent.

It should be the task of the Concept Paper exercise to identify and understand such possibilities for building on existing capacity, using as models experiences from Ceará itself, as well as the rest of the Northeast. It is also important that the exercise show, if that is the case, that locating single medium and large plants in towns that are remote from each other, is not the only way to promote rural employment. The literature, the Bank's research, and the Northeast experience itself shows clear other paths. For example, both the Fortaleza garment story and the earlier discussion of agricultural inputs show two other ways of thinking about the issue of creating employment in the interior, let alone economic growth and competitiveness, and of asking questions for the Economic Memorandum. These kinds of opportunities, and pointings of the way, would not be unearthed by the more comprehensive coverage of issues and many of the data-collecting exercises noted above.