Brazil
Broadening the Base for Growth: 
A Report on the State of Bahia

October 26, 2001

Brazil Country Management Unit
PREM Sector Management Unit
Latin America and the Caribbean Region
CURRENCY EQUIVALENTS (R$/US$)

Currency Unit - Real (R$)
December 1996: R$1.04/US$
December 1997: R$1.12/US$
January 1999: R$1.21/US$
February 2000: R$1.78/US$

WEIGHTS AND MEASURES

The Metric System is used throughout the report.

FISCAL YEAR

January 1 to December 31

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
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<tr>
<td>Vice President LCR:</td>
<td>David de Ferranti</td>
</tr>
<tr>
<td>Director LCC5C:</td>
<td>Vinod Thomas</td>
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<td>Director LCSPR:</td>
<td>Ernesto May</td>
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<td>Joachim von Amsberg</td>
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<td>Sector Manager</td>
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<td>William Dillinger</td>
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ABBREVIATIONS AND ACRONYMS

BANEBE  Bahia State Bank *(Banco do Estado da Bahia)*
BID     Interamerican Development Bank *(Banco Interamericano de Desenvolvimento)*
BNB     Northeast Regional Development Bank *(Banco do Nordeste do Brasil)*
BNDES   National Development Bank *(Banco Nacional de Desenvolvimento Econômico e Social)*
FUNDEF  Fund for Maintenance and Development of Education
FGV     Getulio Vargas Foundation *(Fundação Getulio Vargas)*
IBGE    Brazilian Institute of Geography and Statistics *(Fundação Instituto Brasileiro de Geografia e Estatística)*
ICMS    Value Added Tax *(Imposto de Circulação de Mercadorias e Serviços)*
IPEA    Institute of Applied Economic Research *(Instituto de Pesquisa Econômica Aplicada)*
LDB     National Education Law
MEC     (Federal) Ministry of Education
PNAD    National Household Survey *(Pesquisa Nacional por Amostra de Domicílios)*
SAEB    Basic Education Evaluation System
SEI     State Superintendency for Economic and Social Research *(Superintendencia de Estudos Economicos e Sociais da Bahia)*
SESAB   (state) Secretariat of Health
SUDENE  Northeast Development Agency *(Superintendência para o Desenvolvimento do Nordeste)*
SUS     Unified Health System *(Sistema Único de Saúde)*
FOREWORD

This report is based on the findings of two main missions to Bahia in December 1999 and January 2000 and a series of updating missions during 2001. The report was prepared by a World Bank team comprised of Messrs. William Dillinger (Task Manager), Nigel Harris (growth), and Indermit Gill (state pensions). Background papers on education and health were prepared by Alberto Rodriguez and Hernan Montenegro, respectively. Additional sectoral guidance was provided by Jacques Cellier (highways) and Luis Coirolo (rural development). The report was produced under the supervision of Gobind T. Nankani, Director, and Suman Bery and Joachim von Amsberg, Lead Economists. The peer reviewers for this task were Peter Fallon, Shahrokh Fardoust, Lawrence Hannah, and Emmanuel Jimenez.

This report was produced with the assistance of Government of the State of Bahia, under the leadership of Luiz Vasconcelos Carreira, Secretary of Planning. The team’s counterparts in the State Government included Vladson Menezes, Armando Avena, Simone Uderman and Cesar Vaz de Carvalho Jr. The team also received invaluable assistance from Ana Bemvinda Teixeira Lage (Secretary of Administration), staff of the and a wide range of non-governmental organizations operating in the economic and social sectors.

While this report has been discussed with institutions and individuals of the Brazilian Government, the views expressed in this report are exclusively those of the World Bank.
# Brazil: Broadening the Base for Growth: A Report on the State of Bahia

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Executive Summary

i. Over the last thirty years, Bahia has transformed itself from a somnolent rural economy to the leading manufacturing state of the Northeast. In the process, the state government has developed a reputation as a modernizing, fiscally responsible administration. But problems remain. Growth rates, even since the last recession, have been modest. Poverty remains widespread.

ii. Growth Bahia’s economic transformation began in the late 1950’s, with the construction of a major oil refinery. A petrochemicals complex followed in the 1970’s. While these had an important impact on the state’s business climate, their linkages to other sectors of the state’s economy were less than had been hoped. The state is now aggressively pursuing a new round of economic growth. One of its principal targets has been capital intensive, high tech manufacturing. While this has been successful in attracting some very large investments--most recently, a major Ford assembly plant--there are some drawbacks to this approach. Large subsidies were needed to bring these new industries to Bahia. There is some risk that these industries will continue to require subsidies for years to come. There is also some risk that--like the petrochemical plants before them--these plants will remain economic islands with little impact on the broader economy and few benefits for Bahia’s large low income population.

iii. The state is aware of these risks and has taken steps to counteract them. The Ford plant, for example, has been brought to Bahia as part of a cluster of related sectors, which includes not only suppliers of auto parts, but also links to the local petrochemical industry. Spending by employees of the plant and related industries is expected to stimulate growth in services and commerce sectors. In total, the plant is expected to contribute eight percent of GDP by 2006.

iv. Education Bahia’s ability to attract industry and to spread the benefits of industrialization to the majority of its population will require more than industrial incentives, however. It will also require investment in human capital. One key step is to improve the quality of the labor force. Sixty-two percent of the adult population has less than five years of education. Only four percent of the adult population has completed secondary school. Under these conditions, it is difficult to persuade investors that Bahian labor justifies the relatively high wages and benefits that federal regulations require them to pay.

v. The state has begun to address the labor quality problem through reforms in education. Most of its effort to date has been focused on school construction. School management, however, remains a problem. School directors are political appointees and often lack the skill or motivation to perform their jobs effectively. To address this problem, the state has begun to subject school directors to competency tests. Failing
directors are to be replaced by centrally appointed, technically qualified staff. This is a promising initiative, and one the state should continue to pursue.

vi. The task of education reform is complicated by an overlap between state and municipal schools. This has undermined accountability, and left much of the rural primary network in the hands of governments, which are financially or technically unable to run them well. To improve accountability, the state is dividing responsibility for primary education between the state and the municipal levels, with the state taking on the higher grades. Under the terms of federal legislation, the state has recently increased funding for municipal schools. But for schools that are—or will be—under municipal control, the state will need to ensure that adequate management systems are in place.

vii. Health Despite recent improvements, health care indicators in Bahia remain substantially below national averages. Infant mortality, for example, is 34% higher in Bahia than in Brazil as a whole. The causes of Bahia’s poor health outcomes are partly environmental. Coverage of water and sewer networks is low, even in urban areas. The state, through its ownership of the state water and sewer utility, bears primary responsibility for the water and sanitation in Bahia. It is now investing heavily in urban water and sanitation.

viii. The system of curative health care is also at fault. As in education, Bahia has invested heavily in physical infrastructure—hospitals and clinics—but now confronts a management problem. A recent report on public hospital performance criticizes Bahia’s hospitals for low occupancy rates, long lengths of stay, and low ambulatory activity. Underlying this are weaknesses in management and training, difficulties in recruiting and motivating professional staff (particularly in rural areas), and lingering financial problems. The state has recently begun to address these problems. The restructuring of the state health secretariat—begun in 1999— is aimed at improving the regulation, monitoring and financing of the state health system. The state is now experimenting with the privatization or corporatization of publicly owned facilities, through legal arrangements such as management contracts with non-profit organizations. These are promising efforts. To have an impact, they will have to be expanded.

ix. Transportation Infrastructure The state can also improve the outlook for economic growth by helping to remove infrastructure constraints on growth. Tourism and tropical fruit exporting continue to be two of the state’s most promising growth sectors. The state has already invested heavily in improving road and air access to the state’s principal tourism sites, and is considering measures to facilitate the export of tropical fruits. In fact, most of the road network under state jurisdiction is in relatively good condition. It is the parts under federal control that are not. While the state is not directly responsible for these segments, it can take two measures to improve them. First, it can agree to accept the proposed decentralization of selected federal highways. Second, it can encourage the local office of the federal highway authority adopt the management reforms that the state itself already has in place.
x. The highway network is not the only constraint on Bahia’s growth that originates at the federal level. For small and medium sized firms, for example, the high cost of capital is an important factor. High interest rates are largely the product of federal fiscal policies. While they have been key to the Government’s successful stabilization program, they have been a constraint on the growth of firms that lack other sources of investment financing. National labor regulations, by the same token, impede Bahia’s ability to compete for investment on the basis of wages. In the short term, Bahia must work around these constraints. In the longer term, it should work with other states to remove them.

xi. Poverty The state’s poverty reduction strategy focuses on growth. Given the pervasiveness of poverty in the state, there is much to be said for this approach. But much of the state’s growth strategy—with its emphasis on capital intensive manufacturing—has little direct benefit for the poor. Historically, poverty in Bahia has been closely associated with agriculture. The lack of continuous access to productive land has historically been the greatest single cause of poverty in the state. Since the typical Sertão farm is not large enough to maintain a family, households typically supplement their income through other forms of employment. Over time, this has resulted in the urbanization of Bahia’s low-income labor force. Recent declines in poverty rates, in fact, reflect a shift in employment out of agriculture toward higher wage service jobs.

xii. The state has several programs aimed at raising incomes through rural development. But given the high degree of land concentration in Bahia and the adverse climatic conditions that prevail in much of the state, the role of family farming in a future, prosperous Bahia is fairly limited. The principal objective of rural development should be to ameliorate the living conditions of those who are either too young or too old to migrate, or who find themselves among the fortunate few with sufficient land or access to off-farm employment to support themselves adequately in situ. Instead, the state should address poverty by stepping up its efforts to improve education and health. There is evidence that investment in these sectors can increase expected earnings—particularly if beneficiaries are willing to migrate to urban areas.

xiii. Rural pensions The Federally-funded rural pension system has been more successful in alleviating rural poverty. While there is a critical need for reform in the federal pension system as a whole, the state should support the continuation of this part of the system.

xiv. Fiscal situation Bahia’s fiscal situation has two implications for growth and poverty reduction. First, it affects the state’s ability to provide services, both to firms and to households. Second, it affects investors’ perceptions of the state’s management ability.

xv. The state is now in a fairly strong fiscal position, due to a decade of fiscal discipline. Tax revenues—although susceptible to inflation, federal trade policies, and changes in oil- and public utility prices—have generally kept up with economic growth. Fixed expenditures are modest, with active personnel costs equal to only 45% of net current revenue. While debt levels are high, most of the debt is owed to the federal government, and is subject to debt service ceilings. Its carrying cost is therefore low. But there are problems on the horizon. The debt stock is rising as a percent of revenues. And, like all Brazilian states, Bahia confronts growing pension liabilities.
xvi. The state has attempted to address the pension problem by increasing worker contributions and establishing a pension fund, capitalized from asset sales. These measures will not be sufficient, due to the generosity of federally mandated pension benefits. The key to sustainable pension reform lies at the Federal level. A means must be found to reduce the pension benefits of existing employees. Pending federal reforms, the state should take full advantage of its newly acquired authority to reduce pension benefits to newly hired staff. It would also be well advised to maintain its prudent fiscal policies, even to the extent of reducing debt-financed capital spending.

xvii. Overall, this report is optimistic about Bahia’s prospects. The economy is increasingly diversified. New entrants to the labor force, while still underskilled, are better educated than their forebears. The state’s strong fiscal condition gives it room to address gaps in social services. But a less capital-biased growth strategy, combined with (1) federal-level reforms in fiscal policy, labor legislation, and pension regulation, and (2) state-level reforms in the management of social services, would enhance the state’s growth prospects and hasten the reduction of poverty.
1. THE SETTING

INTRODUCTION

1.1 Over the last thirty years, Bahia has transformed itself from a somnolent rural economy to the leading manufacturing state of the northeast. This transformation began in the 1950s, with the construction of a major oil refinery. A petrochemicals complex followed in the 1970s. But oil and petrochemicals have had a relatively limited direct impact on the broader economy. Few manufacturing sectors other than oil have taken off. Despite the modern composition of GDP, nearly forty percent of Bahia’s labor force is employed in subsistence agriculture. Poverty is acute and widespread. The median family income in Bahia is only 58% of the national average. Rates of educational attainment and infant mortality are high.

1.2 The current state political leadership has held office since 1991. During that period, it has aggressively pursued a program of industrial diversification, based in large part on tax incentives. More recently it has begun to invest in social sectors—particularly primary education. The results have been mixed. Per capita growth rates since the last recession have averaged 1.8% per year. While the poverty rate has improved since the end of the last recession, over half the population live in households with per capita incomes under two minimum salaries. Other correlates of poverty are equally worrisome. Sixty two percent of the adult population has less than five years of education. Infant mortality rates are 34% higher than the national average.

1.3 The state is in a relatively strong fiscal position to address these problems, thanks to a decade of prudent fiscal policies. This gives the state considerable freedom of action. The aim of this report is to define ways in which the state can use this freedom of action to provide the basis for sustained, broad-based economic growth.
The Geographical Setting

Bahia lies on the cusp of the northeast region of Brazil. It is the largest northeastern state, both in terms of population (12 million) and in terms of land area (slightly larger than France). Geographically, Bahia consists of three major regions:

The coastal region, well watered and flat, is the traditional location of Bahia’s plantation agriculture. Originally dominated by sugar cane (in the Reconcavo region to the immediate west of Salvador), it later came to be dominated by cacao (concentrated in the Litoral Sul). Salvador, the state capital and site of the state’s petroleum refining and petrochemical complex, lies within the coastal region.

West of the coast, altitude rises and rainfall declines. This is the Sertão, the longstanding area of rural poverty and periodically devastating droughts. (Officially, 69 per cent of the state is considered semi-arid.) Economic activity is dominated by subsistence agriculture and cattle raising. For decades, the Sertão has been a byword for entrenched poverty. However, the image is established less by the “normal” times of adequate if sparse rainfall (supplemented by groundwater and local reservoirs) than by the intense misery occasioned by the periodic cycles of drought. During droughts, the impoverished cultivator may be driven to temporarily abandon his land, sell off his cattle, and migrate either to south of Brazil or to the coast for work, only to return when rainfall resumes.

At the state’s westernmost edge, rainfall rises again. This is Bahia’s agricultural frontier: a sparsely populated zone largely devoted to large scale soy and grain production. Recent expansion in irrigated acreage has brought population growth and relative prosperity to this region.

Within each these major regions lie distinct micro economies. In the north of the Sertão along the São Francisco river, for example, irrigated fruit production is now expanding rapidly. In the southernmost part of the coastal region, cellulose has emerged as a major product.

THE ECONOMY

1.4 Bahia—along with Pernambuco—was the preeminent region of initial Portuguese development in Brazil. Sugar cane—produced for export to Europe—dominated the economy in the 17th and early 18th century. Until 1763, Salvador was the capital of Brazil.

1.5 The state’s subsequent decline accompanied sectoral shifts in the Brazilian economy. An 18th century mining boom drew labor to the neighboring state of Minas Gerais. In the 19th century, a coffee boom—first in Rio de Janeiro, later in São Paulo—shifted the focus of Brazil’s economy definitively southward.

1.6 The wave of industrialization that swept São Paulo at the turn of the last century passed Bahia by. Most studies have attributed the rise of São Paulo—and the relative decline of other regions in Brazil—to the impact of the coffee economy. As coffee prices increased sharply during the period around the turn of the century, the production of coffee expanded rapidly in São Paulo. Coffee profits allowed for the accumulation of savings for capital investment. Coffee processing fostered the development of
infrastructure—particularly electric energy. An influx of immigrants into the region provided entrepreneurial talent and skilled labor. A growing regional consumer-goods market then provided the conditions for growth in manufacturing and services.¹

1.7 The trade restrictions imposed during the first world war fostered growth in import-substitution-based manufacturing. This large benefited São Paulo, as the major part of the consumer market, the trained labor force, and adequate physical and service infrastructure were already concentrated there. Between the first industrial census in 1907 and the third census in 1939, São Paulo’s share in Brazil’s industrial production increased nearly three-fold, while the share of the northeast declined by 40%.² An explicit import substitution strategy followed in the 1950s. Federal efforts to foster the growth of specific sectors—automobiles, cement, steel, aluminum, cellulose, heavy machinery, and chemicals—tended to benefit sectors that were already in—or became established in—São Paulo.

1.8 Efforts to revive Bahia’s economy started in the late 1950’s. In 1959, the federal government established a regional development authority, SUDENE, and a system of tax incentives aimed at encouraging capital investment in the Northeast. Termed 34/18 and later FINOR, the tax incentives permitted firms to take up to a 50% tax credit for investments in industrial and agricultural projects in the Northeast (subject to the approval of SUDENE). In effect this created a captive capital market for the northeast development projects.

1.9 But Bahia’s economic revival did not really occur until the advent of the Brazilian ‘miracle’ of 1967-73. With the aim of transforming Brazil into a modern capitalist power, the military regime which took power in 1964 implemented a series of reforms aimed at reducing inflation, restraining wage demands, and encouraging investment—both foreign and domestic. It also took steps to develop basic industries and public utilities, through the creation of forced savings schemes and state enterprises. This was not economic liberalization, however. Instead Brazil during this period was a highly protected economy in which the Government played a major role in the allocation of resources.

¹ Cano, Wilson; 1985, Desequilibrios Regionais e Concentracao Industrial no Brasi, Sao Paulo, SP: Global Editora
² Amado, Adriana; 1997; Disparate Regional Development in Brazil; Brookfield, VT: Ashgate
1.10 Aided by a favorable external environment, Brazil boomed. As shown in the chart above, Brazil’s GDP grew at an average annual rate of 8.5% percent between 1965 and 1980. Bahia boomed in parallel, with growth averaging 10.5% over the period. The principle source of growth in Bahia was heavy manufacturing, financed in large part by the federal government. With the discovery of offshore oil, an oil refinery was built near Salvador. Later came a metallurgical complex at Candeias. In the late 1970s, a petrochemicals complex was constructed at Camacari. Between 1970 and 1985, industry—largely consisting of petrochemicals—accounted for 55% of the increase in Bahia’s GDP. Between 1960 and 1980, the share of industry in the state’s GDP (including not only manufacturing, but mining, construction, and public utilities) increased from twelve percent to 35%.

1.11 The broader impact of the petroleum investments was limited however. Since their inception, the petrochemical complex—and the oil refinery before it—operated as economic islands in Bahia. The petrochemical complex had no backward linkages to the economy—except for the purchase of oil from the equally isolated oil refinery. Its employment impact was constrained by the capital intensity of its production process. It had few forward linkages: the products of the state’s petrochemical were exported—typically to São Paulo—where they were incorporated into goods for final demand. Bahia therefore developed as a dual economy, with a dynamic, capital intensive manufacturing sector contributing to a growing GDP, alongside a stagnant agricultural sector which accounted for the majority of employment but only a small fraction of output.

1.12 Slow growth (1985-1992) With the oil crisis of 1979, a growing stock of foreign debt, and the world debt crisis that followed the Mexican moratorium on payment of foreign debt, Brazil’s economy took a downturn. A sharp drop in resource transfers, uncompensated by a rise in net domestic savings, led to reduced investment and growth. Periodic attempts at heterodox stabilization based on wage and price freezes were supported neither by a sufficiently restrictive fiscal stance nor by sustained tight monetary policies and were thus short lived. Between 1986 and 1992, Brazil’s GDP grew at an average annual rate of only 0.46%. Bahia was especially hard hit. Its GDP grew at an average annual rate of only 0.29% over the period.

1.13 Economic Reforms: (1992-) The liberalization of the Brazilian economy, combined with a successful stabilization program, have revived growth, although far below the levels of the 1970s. The process began in 1991 with the announcement of a multi-year reduction in tariffs. As a result, the maximum tariff rate fell from 105% in 1990 to 35% and the average rate from 32.2% to 14.2%. In addition, foreign exchange controls and the list of prohibited imports were eliminated, fiscal incentives for exports and external financing requirements for imports abolished, and the granting of import license made automatic.

1.14 In 1994, the federal government implemented a successful stabilization plan, which has further fostered growth. 3 Since 1992, growth has picked up, albeit modestly. In response to a sequence of financial crises in Mexico, East Asia, and Russia, the federal

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3 The Real Plan (1) introduced an exchange rate anchor with flexibility to move within a band, (2) de-indexed the economy, and (3) implemented tight credit and monetary policies.
government has maintained a tight monetary policy. This, combined with continuing fiscal deficits and a more-rapid-than-expected rate of decline in inflation, led to high real interest rates, and modest rates of growth. Between 1992 and 2000, the Brazilian economy grew at an average annual rate of 3.3%.

Bahia’s Economy Today

1.15 Bahia’s economy has also grown but at a similarly modest rate. This was partly due to the short term costs of adjustment. Trade reforms were hard on Bahia’s petrochemical industry, which had heretofore benefited from high rates of protection. Following the cut in tariffs, the petrochemical firms were forced to restructure, with massive layoffs and consolidations. (They have since emerged as internationally competitive exporters.) Tariff reductions also confronted other manufacturing sectors with the prospect of competition from cheap imports. Manufacturing nevertheless grew at an average annual rate of 4.3% between 1992 and 1998. As shown in table 1, it remained concentrated in the production of intermediate inputs based on local raw materials. The chemical sector—based on oil deposits off the coast—accounted for nearly half of manufacturing production in 2000. Metallurgy—based on copper mining in the state’s northwest—accounted for another 17%.

Table 1 Trends in the Composition of Manufacturing

<table>
<thead>
<tr>
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<th>% industrial production</th>
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<tbody>
<tr>
<td></td>
<td>1990</td>
</tr>
<tr>
<td>Chemicals</td>
<td>54</td>
</tr>
<tr>
<td>Metallurgy</td>
<td>10</td>
</tr>
<tr>
<td>Food products</td>
<td>13</td>
</tr>
<tr>
<td>Paper</td>
<td>1</td>
</tr>
<tr>
<td>Beverages</td>
<td>1</td>
</tr>
<tr>
<td>Textiles</td>
<td>4</td>
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</table>

Source: SEI, Governo da Bahia

1.16 Agricultural stagnated during the 1990’s. This was due to the offsetting impacts of declines in traditional crops and the emergence of new ones. As shown in Table 2, cacao accounted for 36% of crop production in 1985. Falling prices (due to rising production in Asia and Africa) as well as inefficient practices and the onset of disease, caused cacao’s share of production to fall to a mere 15% thirteen years later. Its position has been largely supplanted by soy and grain production in the west. New techniques of production (to overcome acidity in the soil and secure adequate water) led to the opening up of a vast area to new cultivation in the far west. New irrigation schemes and dams made possible new areas of export production in fruit on the northern border. Forestry in the far south has led to the development of an industry in cellulose, along with expanded cattle ranching in the Porto Seguro area. Growth rates in the traditional products of subsistence agriculture were modest over the period. The share of beans, manioc, and corn increased from 21% of production to 24% over the period.

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4 SEI (Secretariat of Planning, Bahia State Government) 2001; Indices do Produto Interno Bruto Segundo Atividades 1975-2000; website

5 Note that the years used for GDP comparisons were both non-drought years.
1.17 The services sector expanded rapidly during the 1990s. Among the major services sectors, it was communications, transport, construction and tourism that grew most rapidly. As shown in Table 3, output in communications grew at an annual rate of 15%; the other three sectors expanded by roughly five percent per year.

1.18 Overall, Bahia remains very much a dual economy. While agriculture contributes only ten percent of GDP, it accounts for 42% of employment. Manufacturing, on the other hand, contributes 20% of GDP, but only six percent of jobs.

<table>
<thead>
<tr>
<th>Cacao</th>
<th>15</th>
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</tr>
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<tbody>
<tr>
<td>Beans</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Soy</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Manioc</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Coffee</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Sugar cane</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Corn</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Tropical fruits</td>
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</tbody>
</table>

IBGE: SEI

Table 3: Sectoral Trends in Bahia's Economy

<table>
<thead>
<tr>
<th>% of total, 1998</th>
<th>Change 1992-98 (avg. annual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>agriculture</td>
<td>10%</td>
</tr>
<tr>
<td>mining</td>
<td>1%</td>
</tr>
<tr>
<td>manufacturing</td>
<td>21%</td>
</tr>
<tr>
<td>public utilities</td>
<td>4%</td>
</tr>
<tr>
<td>construction</td>
<td>12%</td>
</tr>
<tr>
<td>tourism</td>
<td>2%</td>
</tr>
<tr>
<td>commerce</td>
<td>8%</td>
</tr>
<tr>
<td>transport</td>
<td>2%</td>
</tr>
<tr>
<td>communication</td>
<td>3%</td>
</tr>
<tr>
<td>finance</td>
<td>5%</td>
</tr>
<tr>
<td>rent</td>
<td>12%</td>
</tr>
<tr>
<td>public administration</td>
<td>13%</td>
</tr>
<tr>
<td>other services</td>
<td>6%</td>
</tr>
<tr>
<td>total</td>
<td>100%</td>
</tr>
</tbody>
</table>


Nevertheless, as of 1998, Bahia remains one of the poorest states in Brazil. In 1997, median family income in Bahia was only 55% of the national average and was below that of five of the other eight northeastern states (Table 4). (By 1999, family income had grown to 58% of the national average.) The forty percent of the population living in households with a per capita income below 2 minimum wages is nearly twice the level of the nation as a whole.

Poverty

1.19 The recent growth of the economy has reduced poverty levels in Bahia. Comparing household survey data from the end of the last recession with the most recent available data (1998) shows that the number of people living in poverty (defined here as per capita household income below 2 minimum salaries) has declined not only relatively but absolutely. Half of Bahia's population lived in households below the poverty line in 1992; this proportion fell to 40% in 1998, a drop in absolute terms of 15% over the six year period. The proportion of people in households with per capita incomes of less than 1 minimum salary fell from 23% in 1992 to 15% in 1998.

Nevertheless, as of 1998, Bahia remains one of the poorest states in Brazil. In 1997, median family income in Bahia was only 55% of the national average and was below that of five of the other eight northeastern states (Table 4). (By 1999, family income had grown to 58% of the national average.) The forty percent of the population living in households with a per capita income below 2 minimum wages is nearly twice the level of the nation as a whole.

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6 1998 is the most recent year for which data from the national household survey is available.
1.20 Historically, poverty in Bahia has been closely associated with agriculture. In 1998, 73% of the population earning less than 1 minimum wage cited agriculture as their primary form of employment. The source of low agricultural incomes can be traced, in part, to the structure of land ownership and the quality of land and climate. Rural land ownership is characterized by a high degree of concentration of land in few large establishments and a large number of small farms (minifundios) with an insufficient area to sustain a family by agricultural employment alone. Since 1950's, there is evidence of increasing concentration. The area occupied by farms of over 1000 hectares has grown faster than the area of farms of smaller size.

1.21 The decline in poverty levels between 1992 and 1998 is in part due to an increase in agricultural incomes. The median income of agricultural workers (including unpaid dependents over ten year of age) increased from .16 minimum wages to .29 minimum wages between 1992 and 1998. The number earning less than .5 minimum wages dropped in absolute terms by 20%.

1.22 But the drop in poverty also reflects a shift in employment out of agriculture toward higher wage service jobs. Since the typical Sertão farm is not large enough to maintain a family, households typically supplement their income through other forms of employment. Over time, this has resulted in the urbanization of Bahia’s low-

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Table 4: Median Family Income Northeastern States

<table>
<thead>
<tr>
<th>State</th>
<th>Median Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>303.8</td>
</tr>
<tr>
<td>Northeast</td>
<td>162.4</td>
</tr>
<tr>
<td>Rio Grande do Norte</td>
<td>182.9</td>
</tr>
<tr>
<td>Sergipe</td>
<td>181.3</td>
</tr>
<tr>
<td>Pernambuco</td>
<td>177.5</td>
</tr>
<tr>
<td>Alagoas</td>
<td>170.2</td>
</tr>
<tr>
<td>Paraiba</td>
<td>168.7</td>
</tr>
<tr>
<td>Bahia</td>
<td>168.2</td>
</tr>
<tr>
<td>Ceara</td>
<td>155.2</td>
</tr>
<tr>
<td>Maranhão</td>
<td>132.1</td>
</tr>
<tr>
<td>Piauí</td>
<td>117.2</td>
</tr>
</tbody>
</table>

Source: IPEA, Atlas de Desigualdades Regionais

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Diagram: Trends in Median Earnings

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Note: SEI, 1999, *Novos Mundos Rurais Rainaos*, Serie Estudos e Pesquisas No. 42; Salvador BA
income labor force. It is now in commerce, services, and to a smaller degree manufacturing and construction where the poor work. Domestic service, repair, restaurants and hotels, and commerce account for about a quarter of employment. As shown in the chart at left, wages in these sectors are not high. (In fact, wages in domestic, hotel, and restaurants appear to have declined since 1992.) They are nevertheless substantially higher than in agriculture.

1.23 Demographics Part of the decline in poverty is also due to demographics—specifically a fall in dependency ratio. Bahia is in the middle of a baby bust. After expanding at 2%-2.5% per year between 1950 and 1990, Bahia’s population increased by only 1.1% per year during the first half of the 1990s. This was largely due to a sharp drop in the birth rate. Fecundity—the number of children per mother—dropped from 6.23 in 1980 to 2.99 in 1991. This has produced a sharp drop in the dependency rate. In 1980, the number of children under 10 was 31% of the population. In 1992 it was 24% and in 1998, 21%. At the same time, the number of elderly dependents has not caught up. In 1998, only 5.6% of the population was 65 or older.

1.24 According to a recent state report, these trends are likely to continue. As a result, in twenty years, Bahia is expected to have a population only 18% larger than today’s. This will have a significant effects on the state’s efforts to reduce poverty. For the next few decades, the ratio of children to working age population will decline, while the number of retirees will remain small. As a result, not only will dependency ratios fall, but the amount the state must spend on expanding the quantity of social services will decline. This will free up resources to spend on improving quality.

1.25 In the longer term, the slowdown in Bahia’s population growth will affect poverty through its broader effects on the labor market. Historically, rapid population growth has resulted in an elastic supply of unskilled labor in Brazil. As a result, wage levels have remained low—except for high skill, well educated workers—even in times of rapid economic growth. Bahia’s “baby bust” will eventually moderate this factor. Declines in the growth of the labor force will reduce the supply of labor. This may result in increasing pressure on wages, which in turn may prompt the substitution of capital for labor, increasing labor productivity, and setting off a virtuous cycle of rising wages and rising productivity.

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8 Note that out-migration also reduces the state’s population growth by 0.5% annually.
9 SEI, 2000, Bahia em Numeros 2000, Salvador, BA
2. ECONOMIC STRATEGY

2.1 The state’s economic development policy is highly pro-active. While it includes support for commercial agriculture and tourism, it is largely aimed at expanding manufacturing. Growth in the modern economy, in turn, is at the core of the state’s poverty strategy. To this end, the state has mounted an aggressive marketing campaign, aimed at luring out-of-state investors to Bahia. Tax incentives, combined with access to financing, training, and infrastructure, are at the core of this strategy.

CONSTRAINTS ON GROWTH

2.2 In evaluating this approach, it is useful to begin by examining the principal constraints on Bahia’s economy. Many are not unique to Bahia—they affect all of Brazil, and in fact explain why Bahia’s growth so closely parallels that of the country as a whole. While many are not under the control of the state government, they demonstrate the barriers that the state will have to overcome if it is to achieve the growth rates it has in mind.

Isolation and small market size

2.3 It is said that a principal constraint on the development of Bahia’s economy—particularly in the manufacture of goods for final demand—is the small size of the local market and its remoteness from the large markets of the south. The market for local consumer goods is small—not so much because the Bahia’s ability to access foreign markets is affected by Brazil’s trade regime: its exchange rate and the tariff structure on imports and exports. As noted earlier, Brazil’s long standing import substitution policies tended to favor the Southeast. With the reduction in tariffs in 1990, the bias has become less pronounced. In addition, the federal government is now taking deliberate steps to encourage exports. Along with tariff reductions, the Kandir Law (1998) requires states to exempt exports from the value-added tax, adding to exemptions already conceded from federal taxes. Recently, social contributions were cut by half for sales abroad. In January 1999, the government also made an abrupt change in exchange rate policy, abandoning the strong currency anti-inflation anchor of the Real Plan and declaring the Real to be freely floating. Although these changes are too recent to have had a demonstrable impact, they are likely to improve the prospects for exports.

Do Federal Trade Policies Constrain Bahia's Economy?

Bahia’s ability to access foreign markets is affected by Brazil’s trade regime: its exchange rate and the tariff structure on imports and exports. As noted earlier, Brazil’s long standing import substitution policies tended to favor the Southeast. With the reduction in tariffs in 1990, the bias has become less pronounced. In addition, the federal government is now taking deliberate steps to encourage exports. Along with tariff reductions, the Kandir Law (1998) requires states to exempt exports from the value-added tax, adding to exemptions already conceded from federal taxes. Recently, social contributions were cut by half for sales abroad. In January 1999, the government also made an abrupt change in exchange rate policy, abandoning the strong currency anti-inflation anchor of the Real Plan and declaring the Real to be freely floating. Although these changes are too recent to have had a demonstrable impact, they are likely to improve the prospects for exports.
can operate on a large scale with dramatic economies of scale. On this basis, they can not only under-price Bahian goods sold in Southeastern markets; they can under-price Bahian goods sold in Bahia. Costs of production in São Paulo are said to be so low that manufacturing firms find it is cheaper to import Bahian intermediate inputs to the Southeast and re-export the finished products back to Bahia than it is to manufacture in Bahia.

2.4 Bahia does, of course export. But Bahia’s exports largely consist of semi-processed raw materials—sectors where it has a substantial natural resource advantage. About a third of the state’s international exports are produced by the petrochemical industry, another 28 per cent by the paper and cellulose and metallurgical industries, with raw or part-processed raw materials making up the rest. Bahia’s “exports” to the rest of Brazil, similarly, consist of semi-processed raw materials. While sectoral data on the composition of interstate exports is not available, it is understood that these largely consist of the products of the petrochemical complex—plastic pellets and resins, and copper wire—which are sold to manufacturers in the Southeast to be incorporated into products for final demand. But these sectors generate few jobs in Bahia and have few linkages to the rest of the state economy.

2.5 Labor quality and labor regulation Labor quality is also a constraint of Bahia’s growth. One quarter of the active labor force has less than one year of education; over half has less than four years. As shown in Table 5, while Bahia has made great strides in improving education over the last ten years, sixty percent of the population has less than five years of education. Less than 13% of the population had over eight years of schooling. This is an important constraint for firms that require skilled labor. While the pool of unskilled labor is ample, the pool of skilled labor is not.

<table>
<thead>
<tr>
<th>Table 5 Education Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>% illiterate</td>
</tr>
<tr>
<td>% less than 5 years of school</td>
</tr>
<tr>
<td>% more than 8 years of school</td>
</tr>
<tr>
<td>Source: SEI Website; indicadores sociales. Note data on illiteracy is for 1990 and refers to population over 5 years of age. Data on years of schooling refers to population of ten or over.</td>
</tr>
</tbody>
</table>

2.6 Does low cost compensate for this lack of skills? Cheap labor has been widely touted as the principal comparative advantage of the Northeast. But federal regulations may prevent Bahia from playing the low-wage card. The national consolidated labor law (CLT) and the 1988 Constitution stipulate a very comprehensive set of minimum standards that any contract between employers and employees must follow. The rules provide little space for negotiations between employers and workers. The result is a rigid set of minimum rules which reduces the ability of labor markets to adjust to differences in the local economic

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11 About 36 per cent of out-of-state deliveries goes to São Paulo, 14 per cent to neighboring Minas Gerais and 11 per cent to Rio Grande do Sul.
environment. Until 1995, Brazil had a wage adjustment law that gave the Government the right to determine the minimum rate of adjustment of all wages in the formal sector of the economy. In 1995, after the Real plan, the wage law was abolished. Today, upward adjustments of wages are negotiated between employers and employees. But downward adjustment of wages is for all practical purposes prohibited by the Constitution. Attempts to do so leave employers open to lawsuits which are generally resolved in favor of the worker.

2.7 In addition, federal law imposes various payroll taxes and mandatory benefits that apply drive up labor costs. Direct surcharges add up to 65% of the wage bill, consisting principally of contributions to the retirement system (INSS), the severance fund (FGTS), mandatory paid vacations, and annual bonuses. In addition, employers are charged levies on revenues to pay for retirement related obligations, PIS/PASEP, and contributions toward the workers training fund (FAT). The various charges for unemployment insurance, pension benefits, and training can add up to more than 100% of the net take home pay of workers in the formal sector.

<table>
<thead>
<tr>
<th>Table 6 Comparison of Wage Rates in Selected Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Index: Northeast Brazil = 1.00)</td>
</tr>
<tr>
<td>Germany: 21.90 Brazil (North East): 1.00</td>
</tr>
<tr>
<td>US: 12.30 China: 0.52</td>
</tr>
<tr>
<td>Brazil (south): 2.40 India: 0.50</td>
</tr>
<tr>
<td>Turkey: 1.95 Indonesia: 0.24</td>
</tr>
<tr>
<td>Thailand: 1.60 Mexico: 1.50</td>
</tr>
</tbody>
</table>

2.8 At first blush, it would appear that much of Bahia’s labor force is not affected by labor legislation. Less than half the working labor force (42% in 1998) are employees and therefore subject to legislation governing employer-employee relations. Of this, the proportion employed in the formal sector (with signed labor cards approved by the Ministry of Labor) is less than 40%. But even the informal labor market is affected by formal labor rules. This is because informal employees can take their employers to court—which have sweeping powers under current Brazilian law—in order to force them to pay for their legal working rights, regardless of whether their contract has been ratified by the Ministry of Labor. Given the high probability of cases being resolved in favor of the worker, employers accord these workers all the rights under the labor law even when they do not have legal contracts.

2.9 High cost of capital An additional constraint is the high cost of domestic capital. Bahia is not alone in this respect. Like many developing countries, Brazil has historically suffered from a scarcity of private financing for long term private sector investment. Long histories of macroeconomic instability have caused private investors to view long term financial commitments of any kind as extremely risky. National legislation makes it difficult for lenders to collect overdue debts. At the same time, persistently large federal deficits have created an demand for such funds. The federal government relies

Gill, Indermit and Claudio Montenegro, eds. 2000, Readdressing Latin America’s Forgotten Reform, Quantifying Labor Policy Challenges in Argentina, Brazil, and Chile, mimeo

Gill, op.cit.
heavily on the short term private market to finance its deficits, driving up interest rates and crowding out private sector borrowers.  

2.10 Historically, federally-subsidized directed credit has been used to offset the high cost and short maturities of private domestic financing in Brazil. BNDES, financed from contractual savings, has been instrumental in financing industrial investment throughout Brazil, including in Bahia. Foreign investment, too, has been used to get around the high cost of domestic capital. In the last half of the 1980s, the inflow of foreign investment was running at only US$2 billion annually. The scale picked up after the introduction of the Plano Real. By 1988, the inflow reached $32 billion. But what this means is that decisions as to the location of capital investment often depend upon the favorable opinion of the federal government and/or the ability to attract foreign investment in an environment rife with tax concessions and other incentives. For large scale private investment projects that have the backing of government, financing may therefore not be a major constraint. The story may be different for small firms, however. Interviews with small scale manufacturers in the textile and garments industries suggest that the high cost of capital is an important constraint on their profitability and on their expansion plans.

**BAHIA’S INDUSTRIAL POLICIES**

2.11 Bahia’s economic development policies do not address these constraints directly. Instead, the state relies heavily on tax- and other firm-specific incentives. The incentives include across-the-board tax reductions for investments in a wide range of sectors, as well as specific incentives aimed at particular regions or industries. In the former category is PROBAHIA, which offers a 6-year partial tax deferral on the state value added tax (ICMS) to firms starting new operations (or expanding existing operations by at least 35% of installed capacity) in manufacturing, agriculture, mining, tourism or electricity generation. The proportion of tax subject to deferral starts at 75% (except in Salvador where it starts at 50%) and declines in two-year increments. The deferral is tantamount to a grant: the deferred amount is subject to a 3% nominal interest rate with no monetary correction.

2.12 The state also offers specific packages of incentives for specific industries. Investments in the automobile industry are eligible for a 75% ICMS exemption for the first five years, and 37.5% exemption for the subsequent five. The car industry is also offered favorable administrative treatment in the assessment of the ICMS (taxes are not due until the product leaves the factory), subsidized land, immediate provision of public utilities (electricity, water, gas, sewerage, telephones) to the site, and training. Other somewhat less generous incentives are offered to investors in the computer industry.

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15 Sustained periods of high real interest rates are not unusual in countries that have undertaken macroeconomic adjustment programs. Although Peru’s fiscal adjustment began in 1990, annual real lending rates did not drop below 20 until the mid-1990’s. Real deposit rates in Argentina took more than a year from the time that stabilization began to reach their current levels. As noted earlier, the persistence of high interest rates after the Plano Real also reflects the federal government’s response to the sequence of international financial crises, as well continuing fiscal deficits.
(provided they locate in the Ilheus industrial district) and in the shoe, furniture, plastic products and boat industries. In addition to tax relief and on-site utilities, the state has proven willing to provide low cost financing and off-site infrastructure.

2.13 To date, the principal beneficiaries of these incentives fall into three main groups. The first consists of capital-intensive, resource-based industries already present in Bahia. This includes the existing petrochemicals and metallurgy sectors, as well as the more recently arrived cellulose industry. A second group consists of more labor intensive manufacturing, including shoes and food processing. The third, and most ambitious group, consists of exotics: sectors that are new to the state and not closely tied to natural resources. This group is largely dominated by automobiles, of which a major Ford assembly plant, now under construction, is a prime example.

<table>
<thead>
<tr>
<th>Table 7 Planned Investment Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>sector</td>
</tr>
<tr>
<td>capital intensive resource based</td>
</tr>
<tr>
<td>wood products</td>
</tr>
<tr>
<td>chemical/petrochemical</td>
</tr>
<tr>
<td>mining, mining products</td>
</tr>
<tr>
<td>petrochemical manuf.</td>
</tr>
<tr>
<td>traditional labor intensive</td>
</tr>
<tr>
<td>agricultural processing</td>
</tr>
<tr>
<td>shoes, textiles, clothing</td>
</tr>
<tr>
<td>exotics</td>
</tr>
<tr>
<td>metal products (cars, etc.)</td>
</tr>
<tr>
<td>electrical/electronic equipment</td>
</tr>
<tr>
<td>other</td>
</tr>
<tr>
<td>total</td>
</tr>
<tr>
<td>Source: Sefiplantec, 2000</td>
</tr>
</tbody>
</table>

2.14 Will these incentives be sufficient to overcome the constraints on Bahia's growth? Are they even necessary? Traditional neoclassical economics would argue that they are not. Theory argues that the role of the public sector is to provide the framework for private economic development--macro-stabilization through fiscal discipline, trade liberalization, financial deregulation, and the improved function of market mechanisms--while relying on private capital and labor to make their own decisions about where to locate and expand. Under these conditions, it is argued, regional economies will expand on the basis of their comparative advantages. Firms engaged in low skill, labor intensive industries will move to locations where these factors are abundant. Labor will migrate to areas where real wages are high. Bahia would eventually catch up with São Paulo.

2.15 Bahian authorities make two counter-arguments. First, they argue that Brazilian labor and capital markets are rife with constraints and impediments. Bahia's ability to play the low wage card, as noted earlier, is impeded by federal wage legislation. The mobility of capital is affected by government's role in its allocation. Competing incentives offered by neighboring states distort the location decisions of potential

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16 This analysis is based on agreements signed to date. Not all agreements will be acted upon.
investors. As these impediments arise from federal policy or the actions of other states, Bahia is in no position to remove them independently. Under these conditions, it may be naïve to rely on the markets alone to stimulate the state's economy.

2.16 Second, they argue that Bahia needs to attract new sectors that require time before they are competitive. In effect, this is the regional equivalent of an 'infant industry' strategy. The strategy has a long history in the development literature. It runs as follows: In an efficient market, capital would be expected to move to locations where rates of return are highest. If the returns on investment in Bahia were higher than in São Paulo, capital would be expected to move toward Bahia. But in some sectors, returns may be affected by economies of scale or agglomeration. Firms may not be able to succeed in Bahia until they achieve sufficient scale or until a network of suppliers and support services is in place. Under these circumstances, regional incentives may be justified as a transitory instrument, a means of enabling capital to move to locations where long run returns will be high, but where the transitory costs posed by lack of scale- or agglomeration economies prevent the efficient movement of capital.  

2.17 Available data does not permit a thorough examination of these arguments. Figures on the costs of industrial incentives—in terms of foregone revenue—are not available, nor are ex post evaluations of output and employment impacts. Available statistics, evidence from other countries, and interviews with a principal beneficiary of the program (Ford) nevertheless provide some basis for analysis. These suggest, first, that targeted incentives are not inconsistent with successful economic development strategies, at least at the national level. (See Annex.) But they also point up three risks. The first—and least harmful—is that the state is simply wasting money, by giving tax incentives to firms that would have invested in Bahia anyway. This may be the case, for instance, for investments in the petrochemical complex or in copper processing—sectors where Bahia has an overwhelming locational advantage relative to its immediate neighbors.

2.18 The second, and more serious, risk is that some firms induced to relocate by incentives may not be able to operate profitably without them. Bahia's remoteness from traditional sources of supply and consumer markets and its poorly equipped yet highly regulated labor force may prove to be insuperable impediments to competitiveness in some sectors. Under these conditions, such firms may close down. Or worse, they may bring pressure on the state to renew their incentives, becoming permanent wards of the government.

2.19 The third risk is that even if the investments prove viable, they will fail to generate broader growth in the local economy. This criticism has already been directed at the petrochemical complex in Bahia. As noted earlier, the complex has very little direct employment impact, due to its capital intensity. This appears to be true of many of the other firms that have signed agreements for industrial incentives. As shown in Table 7, the average investment per job among the participating firms totals R$133,000. It reaches as high as US$ 1.6 million in the case of petrochemicals, and R$50,000 in the case of

17 Note that if the obstacle is a lack of agglomeration economies, encouraging the relocation of a single firm will not help. It is only by encouraging the relocation of a cluster of related activities that agglomeration economies can be achieved.
wood products (cellulose) and mining products. The direct employment impact of these investments is likely to be minor. And judging from the experience of existing firms in these sectors, their impact on the broader economy, through backward- or forward linkages—may be small.

### Are tax incentives cost-free?

It has been argued that Bahia has nothing to lose in offering tax incentives to potential investors. If it did not offer tax breaks, it is said, the firms would not have come at all. From Bahia’s standpoint, there is some truth to this argument. But the tax incentives do cost Brazil. In the absence of incentives, the firms would presumably have located somewhere in the country. In this sense, the incentives represent foregone revenue to some state government, if not Bahia’s.

2.20 Bahia’s decision to pursue the automobile industry illustrates some of the risks of the strategy. For the automobile industry, Bahia does not appear to offer any advantage over alternative locations—the interior of São Paulo state, the south of Minas Gerais, or Parana—that already possess a pool of skilled labor and access to an existing network of suppliers. In granting this package of inducements, Bahia is assuming that Ford, and firms like it, will establish a foothold in Bahia, and will thrive once the incentives end. And that they will not only stay, but will stimulate broader growth in the economy.

2.21 Ford’s main production facilities are now located in metropolitan São Paulo. According to Ford officials in São Paulo, Bahia was not an immediately obvious location for expansion. First, it lacked a skilled, trained labor force. Unlike metropolitan São Paulo, Bahia had no existing high-tech assembly industry from which to draw workers. Labor costs were expected to be significantly lower in Bahia than in São Paulo, by about 50%. But labor costs were not a decisive factor. Due to the high level of automation in modern car plants, labor represents only about 15% of production costs.

2.22 Isolation was another strike against Bahia. Ford faced two transport disadvantages. First, it was far from suppliers. The auto parts industry was well established in São Paulo where the industry has existed in the 1950s. It was virtually non-existent in Bahia. Distance from consumer markets was also a concern. Although Ford will market its product as “the car of the Northeast”, the regional market is small. Eighty percent of domestic production is expected to go to the South/Southeast, and much of the rest to Mercosul.

2.23 In choosing to open the Bahia plant, Ford was forced to offset these constraints. To address its remoteness from suppliers, Ford had to adjust its production technology. It

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18 Not all supply factors work to the disadvantage of Bahia. Steel, for example, comes from Minas Gerais, which is equidistant from ABC-Paulista and Camacari.
19 For Ford, the cost of capital was not an ex ante factor in differentiating production of Bahia and São Paulo. For Ford, the costs of mobilizing domestic or international investment would be the same regardless of where the plant was located. The state government’s ability to mobilize low costs financing through BNDES and other sources, was however, a decisive factor in bringing Ford to Bahia. (Source: Interview with Amazon Program supervisor, Ford Motor Company, Sao Bernardo do Campo, SP, Brazil)
did so by forcing suppliers to open separate operations in Bahia, many on the plant premises itself. (Ford will continue to import engines from its plant in São Paulo.) To address the high cost of shipping finished products to the Southeast, Ford itself changed its marketing strategy—to more exports. In addition, the state agreed to build a new port for car exports.

2.24 To address the labor quality problem, Ford, together with the state and federal government, embarked upon a massive training program to re-create a "Paulista" labor force in Salvador. It began with a pool of high school graduates (itself a highly selective group given the low education levels prevailing in Bahia). Candidates were given 500 hours of initial training, followed by an evaluation, and—for successful candidates—another 400 hours of training. They were offered apprenticeships, becoming permanent staff only after having successfully completed their probation. The costs of this program were paid by the federally-sponsored employee training system, SENAI.

2.25 From Ford’s perspective, these extraordinary measures were counterbalanced by the state’s financial incentives—subsidized credit, tax holidays—as well as by the free training and port facilities designed to its specifications. But will Ford survive the expiration of incentives? Ford management has expressed its firm conviction that the plant will continue to be viable once the incentives expire. While it now costs $500 more to produce a car in Salvador than in São Paulo, the company expects this cost disadvantage to decline as a network of suppliers becomes established.

2.26 Will it have a broader impact on the growth of the economy? The Ford plant, in isolation, will not have a major impact on Bahia’s employment. The 5000 jobs to be created represent about 0.06% of current employment. The state argues that the plant will have major spin-off effects through linkages to the local economy. The company is committed to a high level of “domestic” (i.e. Bahian) content at its new plant. At the outset, 60% of the value of production is to be supplied from local sources. In five years, the proportion is to rise to 85 per cent. In addition, spending by employees of the Ford
plant and related industries will have broader impacts on the services and commerce sectors of the economy. A recent study commissioned by the state planning secretariat estimates that the Ford plant will result in the creation of 60,000 additional new jobs; 22,000 in companies supplying parts to the plant, and the remainder through the impact of employee spending.

**POLICY IMPLICATIONS**

2.27 In the present context, it would be somewhat naïve for Bahia to abandon its industrial incentives and rely entirely on the smooth workings of labor- and capital markets to raise the level of economic activity in the state. Neighboring states offer competing industrial incentives. Labor legislation is excessively rigid, preventing Bahia from using its low wage levels attract investment. Capital is expensive and rationed through federal intermediaries. But there are steps the state can take to reduce the risks and increase the impact of its industrial development program.

- First, the state can directly address some of the factors that contribute to the difficulty of doing business in Bahia. The most obvious is the low quality of the labor force, a subject addressed in the following chapter.
- Second, it can support reforms at the federal level that prevent Bahia from deriving maximum benefit from its comparative advantages. Rigid labor legislation that makes it risky and expensive for formal sector firms to hire labor would be one such target.
- It can also support broader economic reforms at the federal level that contribute to the growth not only of Bahia’s economy, but that of the nation as a whole. The Real Plan’s success in controlling inflation, and the federal government’s more recent success in reducing the federal deficit will stimulate Bahia’s economy for example, by bringing down the cost of capital.

2.28 The state should also continue in its efforts to better understand its own economy, and find areas where targeted state intervention can be effective in overcoming bottlenecks. Background work for this report, as well as related documents (The Pro-Northeast Initiative, for example) have identified a number of sectors that appear to be promising candidates for growth in Bahia.

2.29 Export oriented commercial agriculture is one such sector. Bahia now produces a quarter of Brazil’s exports of fruit and fruit juices. Commercial export of tropical fruit is already a major sector in the mid-Sao Francisco Valley. A recent study on growth opportunities in the Northeast that it could become larger still. The report notes that while Brazil is a large and successful player in international markets in agricultural products such as coffee, soybeans, and orange juice concentrate, the country still exports little of its fresh tropical fruit. According to the study, northeast Brazil could become the “Chile” of tropical fruit, with a reputation for quality and strong commercial contacts throughout the world.

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20 ICF Consulting, 2000, The Pro-Northeast Initiative
2.30 Most of the key constraints on the sector lie within the realm of the private sector. There is, for example, a need for modern packinghouses to fulfill the sometimes stringent requirements of the global marketplace. While a small number of these facilities have been built in the Northeast, more are needed, particularly for small and medium farmers who cannot sell in certain international markets because they do not have access to the proper packing facilities. The report also calls for changes in varietal selections (to match demand in global markets) and better marketing and promotion, in order to create brand recognition.

2.31 The role assigned to the public sector in this effort is relatively small. It is producer cooperatives—not government—that would provide modern packing facilities for small and medium scale producers. Producers would be responsible for varietal selections and—together with overseas marketing partners—marketing and promotion. The state would nevertheless have a key niche role in providing the road networks and port facilities required to move fresh fruits cheaply and expeditiously.

2.32 Services—tradable services—are second area of potential growth. For Bahia, tourism is an obvious candidate. Tourism is an export industry par excellence, generating revenues from both out-of-state Brazilian nationals and foreign tourists. The advantages of Bahia in this field are considerable. At the core are 14 tourist centers (more than any other Brazilian state) the majority scattered along an unrivalled beach of 1,183 kms. Together with one of the greatest collections of colonial heritage in the country, a tropical landscape along the coast, and more hours of sunlight than most other places in the world, Bahia is well positioned to compete for tourists.

2.33 There are, on the latest figures, about 3.9 million tourists, of which about 87 per cent originate in Brazil (the foreign proportion has fluctuated from a peak of 32 per cent in 1994 to 18 per cent in 1998). Numbers are projected to reach between 4.9 and 6.2 million by the year 2010 (generating, on the lower estimate, 4 per cent of State GDP. Of the foreigners, in 1998, about 54 per cent arrived from Europe, 20 per cent from Central and South America (predominantly from Argentina) and 11 per cent from North America. Depending on the year, in the 1990s between a third and a half stayed in classified hotels, up to a fifth in unclassified hotels and the rest elsewhere, including staying with friends.

2.34 Historically, one of the principal constraints on the tourism in Bahia was the lack of infrastructure. Unspoiled beaches were inaccessible by automobile. Those beaches that were accessible were often polluted, due to the a lack of adequate water and sewerage facilities. These constraints fall within the responsibility of the state government and the state has acted on them. Transport facilities for tourism are now fairly good, from the 15 airports (two international, five national and eight subnational)\(^{21}\) to the coastal highway, connecting the entirety of the coastline from north to south. Major sewerage projects are underway in metropolitan Salvador.

\(^{21}\) The international airports are under the jurisdiction of the federal government. The state, nevertheless, is paying much of the cost of their expansion.
2.35 Management is now the major constraint. The interviews carried out for the Pro-Northeast Initiative repeatedly showed that many hotel owners and managers had little professional training and were not familiar with good practices in reservation management, facility maintenance or capital improvement. Many hotel owners complained that they were not content with the quality of the labor force, but viewed investment in training as a waste money, due to the likelihood that workers would leave their jobs in a short period of time. Here there is a role for the public sector, but not necessarily the state government. While the state is primarily responsible for education in grades 5-11, it is federal agencies (SEBRAE, SENAC, SENAE, and the universities) that bear primary responsibility for technical training.

2.36 It is important to emphasize, however, that a strategy that relies on the state government to 'pick winners' and then overcome all the obstacles to their survival is unlikely to succeed. While the state can perform an important role in providing information, and overcoming key infrastructure or human resource constraints, it is individual entrepreneurs who presumably know best where the opportunities lie.
3. SECTORAL POLICIES

3.1 Despite the importance of federal policies, the state has an important role to play in overcoming many of the constraints on economic growth. It also has a key role to play in reducing poverty. The state government’s principal influence is as a provider of public services. Bahia’s budget—nearly R$ 6 billion in 1999—is equal to 14% of GDP, or nearly R$ 500 for every person in the state. Through spending, as well as legislation and regulation, the state has an predominant influence on the quality of social services and infrastructure. The state is also plays a prominent role in health care and the construction and maintenance of intrastate highways.

EDUCATION

3.2 The low quality of Bahia’s labor force is a constraint on growth and poverty reduction. To grow, Bahia must improve the productivity of its labor force. To reduce poverty, it must ensure that the opportunity to increase skills is available to all segments of the population. This will require investments in human capital—particularly in education.

3.3 Bahia is suffering from a long history of educational neglect. Twenty two percent of the population over 5 are illiterate. Sixty-two percent of the adult population has less than five years of education. Only four percent of the adult population has completed secondary school. Even among young adults, educational performance is poor. Only 15% of children age 15-17 attend age-appropriate schools.

3.4 Fundamental Education Compulsory education in Brazil consists of the first eight grades, termed the fundamental cycle. Until recently, rates of enrollment at the fundamental level in Bahia were among the lowest in Brazil. During 1995-1997, the state
constructed, reformed or expanded 1,143 fundamental cycle schools, providing about 60,000 new places. Enrollment in municipal schools grew rapidly. (Due to the state’s decentralization policies—see below—enrollment in state schools declined.) The number of students enrolled in grades 1-8 increased by 33% between 1996 and 1999. As a consequence, enrollment levels increased markedly.

As shown in the chart above, total enrollment increased 40% between 1994 and 2000. Attendance rates also increased. As shown in Table 8, the proportion of children ages 7-14 attending school increased from 87% in 1994 to 96% in 2000. The proportion of children ages 15-17 attending school increased from 60% in 1994 to 88% in 2000.

<table>
<thead>
<tr>
<th>Table 8 Trends in Enrollment Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>(as percent of age group)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>7-14 years</td>
</tr>
<tr>
<td>1994</td>
</tr>
<tr>
<td>1996</td>
</tr>
<tr>
<td>1998</td>
</tr>
<tr>
<td>1999</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>Source: SEC/MEC/INEP</td>
</tr>
</tbody>
</table>

3.5 Quality, however, remains a problem. This is shown, first, by high rates of repetition and age-grade distortions. Repetition rates in Bahia, reaching 21 percent for the fundamental cycle, are some of the highest in Brazil. On average, students take 11.2 years for a child to complete the mandatory eight-year fundamental education cycle. As a result, more than 80 percent of primary students in the Bahia are older than they should be for their respective grades. This is reflected in the high levels of gross school attendance at the primary level: the number of students attending primary school is sixty percent greater than the entire primary school age population. By the same token, while 62% of children ages 15-17 attend school, only 15% are in age-appropriate grades.

<table>
<thead>
<tr>
<th>Table 9 Attendance and Repetition Indicators</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>School attendance</td>
</tr>
<tr>
<td>1998</td>
</tr>
<tr>
<td>Gross</td>
</tr>
<tr>
<td>Primary (7-14 yrs)</td>
</tr>
<tr>
<td>161%</td>
</tr>
<tr>
<td>Secondary (15-17 yrs)</td>
</tr>
<tr>
<td>45%</td>
</tr>
<tr>
<td>Note: gross school attendance is total enrollment divided by the age-appropriate population. Net school attendance is the age-appropriate enrollment divided by the age-appropriate population source: SEC/MEC/INEP</td>
</tr>
</tbody>
</table>

3.6 Teacher quality is low. Out of a total of 109,675 fundamental school teachers, more than 19 percent are considered “lay teachers” as defined by the National Education

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22 World Bank, 2000, Bahia Education Program Project Appraisal Document; Report 19899-BR; Washington DC
Law (LDB). Fully 9,736 primary teachers have not even completed the eight year fundamental cycle.

3.7 Physical inputs--materials and supplies—are inadequate. It is estimated that more than half of primary schools (and nearly one-third of secondary schools) in Bahia do not have the physical inputs necessary to assure the minimum conditions for learning. This affects performance. The 1997 SAEB results show that schools with inadequate physical inputs also had much lower levels of achievement.

3.8 Secondary Education At the secondary level (grades 9-11, ) both coverage and quality are problems. Enrollment rates at the secondary level are extremely low. Only 14 percent of the 15-19 age population is enrolled in secondary education. (Many of the children in this age group are still in primary school, where they contribute to the high level of repetition.) Those who do reach secondary school often drop out. In 1996, only 63% of secondary students graduated.

3.9 Shortcomings in teacher quality at the fundamental level are repeated at the secondary level. In Bahia, out of a total of 19,089 secondary school teachers, 9,980 do not have the required university-level teaching certificate. More than 52 percent are considered underqualified lay teachers by LDB standards, which require that secondary teachers hold a college teaching certificate and diploma in their area of specialty.

3.10 Overcrowding is also a problem at the secondary level. Secondary school enrollments grew by 45 percent in the state system (and doubled in the municipal system) between 1991 and 1996. This was not matched by an expansion in secondary school facilities or teachers. (This is slowly being rectified. Seventeen new model secondary schools will have been inaugurated by the end of 1999, providing places for 24,200 students.)

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23 This requires that primary teachers (grades 1-4) hold at least a normal school teaching certificate and that lower secondary teachers (grades 5-8) possess a university teaching certificate and diploma in their area of specialty.

24 World Bank, 2000; Secondary Education Study in Brazil: A Time to Move Forward; Report No. 19409-BR; Washington DC
3.11 Finally, an often-irrelevant curriculum undermines the quality of education at the secondary level. Due to the high level of repetition at the primary level, the secondary school population includes a diverse range of interests, age groups, and work-study situations. In 1997, 43.5 percent of secondary school students in Bahia were employed, (which explains why almost 70 percent of those who study at the secondary level do so at night). More than 70 percent of third year state secondary students are older than 19, the on-time completion age. The curriculum of secondary schools is not adapted to the realities of those attending this school level.

3.12 **Education Management** Underlying the disappointing performance of the education system are more fundamental problems in education management. This is evident, first, in the overlap in responsibility for fundamental education between the state and municipal governments. Fundamental education is constitutionally a shared responsibility of both levels of government. At present, about 60% of fundamental school enrollment is in municipal schools; the remainder in state schools. The presence of a state education system and 415 municipal education systems, functioning in parallel but without coordination, makes the administration of public schooling in Bahia excessively complex. The overlapping administrative systems operating within each municipality make it difficult to optimize resources, engenders (and even exacerbates) inequality of opportunities, and may facilitate the practice of political patronage.\(^{25}\)

3.13 Incentives confronting management and staff in the education system are misdirected. Many municipal education secretaries and state level officials do not see the students and parents as their primary clients, but tend to serve other political interests, such as the mayor, governor, or local legislators. The notion of accountability to the school community is alien to most mayors’ and local politicians’ experience. Nor is it within the domain of school directors. The highly centralized nature of state and municipal management—which determines all aspects of policy from curricular initiatives to teacher training—discourages school level autonomy and initiative. By the same token, high turnover rates (which can reach 80 percent following a change of government) in the state and municipal education secretariats undermine the commitment of education management staff to long term improvements in educational quality.

3.14 Teachers are discouraged. The lack of an attractive career plan, with salaries adequate to attract and maintain qualified teachers, clearly affects the entire system. Unqualified teachers often work two or three shifts, both within and across systems. Existing mechanisms for upgrading the skills of in-service teachers require them to leave their posts, often without the provision of substitutes. Programs do not take advantage of the potential of other education institutions, especially universities, and lack mechanisms for follow-up on the impact of training on in-class teacher practice. These deficiencies especially affect secondary education, as research indicates that teacher content knowledge and overall education is a strong predictor of academic achievement.

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\(^{25}\) At the secondary level, the problem is not as severe. State schools account for 80 percent of public enrollments. Municipal secondary schools, which typically operate as teacher training or normal schools while municipal schools, attend to 18 percent. The National Education Law (LDB) states that the provision of secondary education should primarily be the responsibility of the state government. As a consequence, the municipal secondary schools are to be phased out, as teachers increasingly are required to meet more stringent qualification requirements.
3.15 Objectives measures of school performance are non-existent. Despite the acknowledged success of the national SAEB exam in comparing system quality within and among states, the absence of a school-level assessment exam reduces accountability at the school and system level. Without a standardized system of evaluation, schools can not evaluate their performance relative to other schools within the community and state, parents do not know how their school compares to other schools, and system managers can not evaluate relative school performance nor demonstrate how schools have progressed (or declined) over time.

3.16 Changes in Federal Policy Two major changes in federal policy have altered the education landscape. The first is the creation of the Fund for Maintenance and Development of Education (FUNDEF). This went into effect in 1998. FUNDEF has had an immense impact on the funding of fundamental education. First, it has increased the amount of federal aid going into the sector. As described in the box below, the Federal government is required to provide supplemental funding for fundamental education in states that fall below a minimum threshold of per-pupil resources. For 1999, federal subsidies to Bahia were estimated to be R$ 310 million. FUNDEF also forced the state government to provide funding for municipal schools. The FUNDEF pool is distributed on the basis of enrollment. In Bahia, municipalities account for 60% of total enrollment, but provide only one third of the FUNDEF resources (net of the federal contribution). As a result, the state is required to make a substantial transfer to municipalities. Net state transfers to municipios totaled R$ 64 million in 1998. In 1999, the figure rose to R$ 130.5 million.

3.17 Municipal resources for education have increased correspondingly, particularly in jurisdictions with high levels of enrollment in municipal primary schools. At the outset, there was some concern that municipalities might divert Fundef resources for non-educational purposes. This does not appear to be a widespread problem. Instead, the increases appear to have gone into teachers salaries. (While data for municipal schools in Bahia are not available, teacher salaries in the Northeast as a whole have increased by more than 50 percent over the last three years.)

3.18 Overall, Fundef appears to be a step in the right direction. Municipal schools have long been the most underfunded component of the education system. The $R 315 standard, nevertheless, does not permit extravagance. In a typical municipal school with perhaps thirty students, this would represent a annual budget of less than R$ 10,000.

3.19 The second change in federal policy took the form of the 1996 Education Law (LDB). This defined government spheres of responsibility in the provision and financing of education and specified pre-service training qualifications for teachers at each grade

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26 Despite the acknowledged benefits of the FUNDEF, there are a number of concerns associated with its implementation. One clear perverse impact of the FUNDEF is the manipulation of enrollment statistics in order to procure additional funding. Because each student enrolled in grades 1-8 generates $R315, state and municipal systems have also enrolled students from adult and pre-school education programs in regular grades 1-8. This has had the immediate effect of greatly increasing the number of students with two or more years of age-grade distortion. The issue of credibility in enrollment statistics continues to be problematic, although the federal government has recently taken steps to mitigate the risk of falsification of information through auditing procedures in many areas.
level. The immediate impact of the LDB is limited. Although it definitively assigns preschooling to municipalities and secondary education to state governments, it does not resolve the ambiguity in responsibility for fundamental education. Under the law, fundamental education continues to be shared responsibility of both levels of government. The certification requirements of the LDB, similarly, do not have an immediate impact. Although all teachers are required to meet the standards by 2007, the law provides no sanctions for those who fail to do so.

3.20 The federal government has, however, established a program for teacher training and certification which it has begun to implement jointly with the state government. The program is aimed at teachers in fundamental schools who fail to meet the minimum LDB qualifications. This is nearly 40% of the total. This initiative (known as Proformação) provides training and teaching skills to uncertified but practicing teachers in a model distance learning program. Designed to initiate a significant number of school teachers in the experience of self-directed, distance learning, this virtual system uses content experts, technology specialists, instruction and learner support, and monitoring and evaluation from a dozen contributing organizations.

3.21 State Initiatives The state government has also taken a number of important initiatives to improve education. First, it has begun implementing its own plan to disentangle the respective responsibilities of state and municipal governments in fundamental education. Under the state's plan, grades 1-4 will be the exclusive responsibility of municipalities. Grades 5-8 will be state responsibilities. The policy responds to the technical reality of the state where 75 percent of the school buildings host grades 5-8 and 9-11 under the same roof. Any other split of resources would be too difficult to effectively implement and monitor in the short term.

A New Source of Federal Aid: Fundef

Fundef is designed to address disparities in education spending by ensuring a minimum per-student expenditure across the nation for students in grades 1-8. Under the Fundef law, each state government must assign 15% of its two principal revenue sources—a VAT and a federal revenue sharing fund (FPE)—to a Fundef account. The municipalities within the state must contribute 15% of their principal transfer revenues (a share of the state VAT and the municipal share of the federal participation fund). If the sum of the state and municipal contributions, divided by the number of primary school students, is less than a standard figure (R$315 in 1998), the federal government is required to make up the difference. The total amount of Fundef funds are then distributed among the state and its municipalities on the basis of enrollment. In Bahia, it is estimated that the contributions of the state and municipalities to Fundef in 1999 totaled only R$222, per pupil, far below the ceiling of R$315 ceiling. Under the Fundef formula, the Federal government would therefore have contributed R$310.4 million, or about 30% of the 1999 Fundef fund.

27 World Bank, 2000; Secondary Education Study in Brazil: A Time to Move Forward; Report No. 19409-BR; Washington DC
28 De Castro, Jorge Abrahao; 2000“Avaliacao do impacto do FUNDEF nas Receitas Fiscais de Estados e Municipios—Estimativas para 1999”; mimeo
3.22 The state is also experimenting with reforms in school management. The principal program, *Educar para Vencer*, is a package of interventions intended to (1) establish minimum operational standards for schools, (b) professionalize education management through the certification of school principals and teachers interested in management; (3) provide management training for municipal secretaries of education, (4) improve teacher quality through distance education and training.

3.23 To date, the principal focus of *Educar para Vencer* has been the professionalization of school management. In Bahia, school directors have traditionally been political appointees. They have often lacked the skills or motivation to manage school effectively. Beginning in October of 1999, all school directors were required to undergo a standardized test. Those that passed (roughly half the total) received a fifty percent salary increase and were allowed to keep their positions. Those who failed were required to compete with a larger pool of applicants (consisting of any existing teacher who expressed interest) on a second round of standardized tests. Slots were to be awarded on the basis of test scores. Directors who scored below the level of other applicants were to be dismissed. (Action on this final step was to occur after the municipal elections.)

3.24 The state is also making tentative moves toward school autonomy. Community and school-based decision-making have been documented as important elements for successful education reform. The state government is skeptical, however, fearing that local political interests will undermine the government’s efforts at professionalization. Moves toward school autonomy have therefore been limited. While the state now agreed to give individual schools control over their equipment and supplies budget (with state funding distributed among schools on a per pupil basis), the state will retain centralized control over personnel and capital works decisions.

3.25 Education reforms are also included in the state’s *Faz Cidadão* program, an intense program of policy attention and spending focused on the state’s 100 poorest municipalities. The education program of *Faz Cidadão* includes large-scale enrollment campaigns, guaranteed provision of school transport, school-feeding, and textbooks, and payments to parents to keep their children in school. *Faz Cidadão* is also intended to train and certify teachers, by way of state university programs, develop training programs for lay teachers, prepare teachers to adjust their pedagogical practice to the socio-economic, political and cultural reality of the student population, and prepare children for the labor market.

3.26 Taken together, these reforms are promising, but face several obstacles. The transfer of state schools in grades 1-4 to municipalities, for example, has incited opposition from teachers unions. The state will have to find an acceptable method for converting state-employed teachers to municipal employees if the clarification of state and municipal responsibilities for fundamental education is to proceed. The political viability of the state’s efforts to professionalize school management has yet to be tested. Professionalization represents an important loss of local political influence for those who have traditionally controlled the selection process. While the Secretariat of Education has succeeded in its reform program to date, it has yet to face the acid test: as September,
2000, school directors who failed the second round of standardized tests had yet to be fired.

3.27 The state government has capacity constraints. The state will have to provide intensive training and support if implementation is to be successful. Providing this support will, in itself, be a challenge given the limited technical resources within the central state apparatus and geographical dispersion of the municipalities themselves. Monitoring program implementation and revising strategies to meet specific conditions within each municipality will also present major challenges. The state and municipal governments have yet to develop a formal, on-going mechanism to coordinate policy, quality assurance and resource transfers across their respective systems. The state hopes to draw on existing private and public organizations to meet the demands for training under Educar para Vencer and Faz Cidadão. Currently, the supply side of the market for these services is limited to a small group of urban universities and a handful of private firms. In remote areas, such services are virtually non-existent. It is hoped that the increase in funding for training will generate an increase in supply. It is not clear how quickly this will occur.  

3.28 There is, in addition, one unresolved issue of sustainability. The reforms are essentially aimed at strengthening accountability of educational personnel to the state government. This includes the testing and certification of school directors and the establishment of student assessment systems. All monitoring is and will be done by the state government, not by the beneficiaries. Sustained political support is needed to ensure that these reforms will survive over time. One of the best ways to sustain political support is by engaging the interest of parents in the education of their children. Publication of school assessments can help. Plans to disseminate these reports are being created, but concrete actions on how to bolster the public demand for assessment are still in development.

3.29 Is spending on education sufficient? Education is the largest single item of state expenditure in Bahia. As shown in Table 10, total spending by the Secretariat of Education, plus FUNDEF transfers to municipalities, consumed about 25% of net revenues in 1999, up from 22% in 1996. The state, however, has reduced its own spending on fundamental education as its contribution to FUNDEF have increased. Total state spending on fundamental education—including FUNDEF transfers—peaked in 1998. (This was a period of heavy spending on school construction and coincided with state elections.) In 1999, it fell to 15% of net current revenues.

29 This constraint may not surface in the initial years as the Educar para Vencer program initially centers on the most populous municipalities.

30 These figures exclude payments to retired teachers. Consistent time series data on the cost of teachers’ retirement benefits are not available. These obligations were partially transferred to the new state retirement fund beginning in 1998 and data on disbursements by the new retirement fund have not been issued.

31 Note that federal subsidies to municipal schools are paid directly to the municipalities and therefore do not appear in these figures.
Table 10 Spending on Education

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<tr>
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<tbody>
<tr>
<td>Secretariat of education*</td>
<td>697</td>
<td>792</td>
<td>973</td>
<td>1032</td>
</tr>
<tr>
<td>Fundamental</td>
<td>299</td>
<td>340</td>
<td>502</td>
<td>462</td>
</tr>
<tr>
<td>Secondary</td>
<td>135</td>
<td>149</td>
<td>189</td>
<td>172</td>
</tr>
<tr>
<td>Transfers to muns. (Fundef)</td>
<td>0</td>
<td>0</td>
<td>64</td>
<td>131</td>
</tr>
<tr>
<td>Total spending</td>
<td>724</td>
<td>938</td>
<td>973</td>
<td>1033</td>
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<tbody>
<tr>
<td>Total education spending</td>
<td>22%</td>
<td>21%</td>
<td>24%</td>
<td>25%</td>
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<tr>
<td>Primary education</td>
<td>10%</td>
<td>12%</td>
<td>18%</td>
<td>15%</td>
</tr>
</tbody>
</table>

* excluding payments to retirees

3.30 The state intends to further shift its education spending out of the fundamental level toward secondary schooling. This shift is consistent with the most recent data on projected educational demand. Expected reductions in repetition rates at grades 1-4—combined with Bahia’s recent “baby-bust”—are expected to reduce enrollments at this level. In the short run, this will increase enrollments in state fundamental schools—grades 5-8. Students who would formerly be repeating grades 1-4 will now be moving up into the state-provided grades. Much of the cost of this increase will be paid by Fundef, as fund resources follow shifts in enrollments from the municipal to the state level of fundamental education.

3.31 These students will eventually graduate to secondary school, however. This may require an increase in spending. Federal Fundef subsidies do not exist at the secondary level. State spending will have to increase substantially. Some of this can be financed from savings on fundamental education. As repetition rates fall in grades 5-8, the state can shift more of its resources to the secondary levels. But the absence of FUNDEF funding means that these savings will not be sufficient to pay for the increase in costs of secondary education.

3.32 Within the scope of this report, it is not possible to definitively determine whether the state should increase its spending on education. As discussed in Chapter 4, the state’s fiscal situation, while strong, will not permit large, long term increases in spending commitments. To a degree, education will have to compete with other sectors. Given the state’s ambitious program of education reform and the importance of education to the welfare of Bahia’s population and the growth of its economy, the issue of education spending deserves further study.
Beyond the First Eleven Grades

In analyzing Bahia’s education priorities, it is clear that the state has elected to focus on fundamental and secondary education for school-aged children. This makes sense. But there are other education programs that compete for state funding. Some may merit more funding; others, less.

Adult education is a means of correcting for the educational shortcomings of the past. But in deciding how much to spend in this subsector, the state has to consider the opportunity costs of doing so. Returns may be higher at the fundamental and secondary level, where pupils still have a full lifetime to apply the knowledge they acquire. They may be lower for persons nearing retirement or for people who do not intend to join the labor force. While this does not rule out adult education, it does suggest a need for targeting.

Preschool education, on the other hand, is an intervention that can be critical for preparing children for learning. As such it can have an extremely high rate of return. Under the LDB, preschool education is an exclusively municipal responsibility. The state education authorities may nevertheless seek to ensure that sufficient funding is available.

Spending on higher education constitutes a significant part—10%—of the state education budget. The system provides only 40,000 places in a state of 12 million inhabitants. It is not immediately obvious that this level of spending is justified. Given the personal financial returns to college level education, there continues to be a strong case for imposing tuition at this level and reducing state subsidies.

Health Care

3.33 Like education, health care is important to both economic growth and poverty reduction. Maintenance of good health is an important way to improve labor productivity. It is also a means of addressing one of the most pressing aspects of poverty. In Brazil as a whole, children born to the poorest families are five times more likely to die before their mothers reach the age of forty than children in the top ten percent of families.\(^3\) For the Bahia state government, there are two questions: what are the principal causes of poor health, particularly among the poor; and (2) what can the state government do to address them?

3.34 Despite recent improvements, health care indicators in Bahia remain substantially below national averages. Infant mortality, for example, has decreased from 88.2 deaths per thousand live births in 1980 to 47 deaths per thousand births in 1999 (although there is current under-reporting of infant deaths).\(^3\) Despite this recent progress, the risk of dying before reaching the age of one is 34% higher in Bahia than the national average. Maternal mortality also remains a problem, although one that is difficult to measure.

\(^3\) World Bank; 1998, Public Expenditures for Poverty Alleviation in Northeast Brazil; Report No. 22425; Washington DC

Official Ministry of Health statistics estimate Bahia's Maternal Mortality Rate (MMR) at 33 deaths per 100,000 live births for 1997. However, other studies place the MMR between 87 to more than 130 deaths per 100,000 live births.

### Table 11 Health Indicators

<table>
<thead>
<tr>
<th>State/Region</th>
<th>Infant Mortality Rate (per 1000)</th>
<th>Life Expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Bahia</td>
<td>45</td>
<td>64</td>
</tr>
<tr>
<td>Northeast</td>
<td>53</td>
<td>62</td>
</tr>
<tr>
<td>Brazil</td>
<td>35</td>
<td>64</td>
</tr>
<tr>
<td>MICs*</td>
<td>33</td>
<td>66</td>
</tr>
</tbody>
</table>

*global average of all middle income countries


3.35 Malnutrition is highly prevalent among children, particularly in rural areas. Protein-energy malnutrition, anemia and vitamin A deficiency are still common. The prevalence of protein-energy malnutrition in Bahia is 11% for weight per age (W/A) and 17% for height per age (H/A). These proportions are twice as high as the national level. While in the city of Salvador the prevalence of child malnutrition (W/A) is 4.4%, it reaches 16% in rural areas. Likewise, children residing in poor rural areas have a 33% prevalence of stunting (H/A). Poor intake of iron has led to high levels of anemia in children living in poor rural areas. It is estimated that about 22% of children living in poor rural areas have anemia.

3.36 Infectious, communicable and vector transmitted diseases are also still important. They account for 14% of infant deaths, 8% of total deaths, and 10% of hospital admissions. They also contribute to worsening the nutritional status of poor children, which in turn, makes them more susceptible to contracting diseases by debilitating their immune system. Dengue and tuberculosis are also important sources of illness and death in Bahia.

3.37 Environmental factors

The causes of Bahia's poor health outcomes are partly environmental. Post-neonatal mortality, which is largely attributable to adverse environmental conditions such as water and sanitation, is responsible for 43% of all infant deaths. Statistical analysis for the Northeast as a whole demonstrates that for the typical poor Northeastern family, having sanitation and safe water cuts child mortality in half.  

3.38 As shown in Table 12, inadequate sanitation is particularly acute among the poor. Thirty percent of the urban poor lack access to piped water. Eighty percent lack access to piped sewerage. Coverage statistics in rural areas are considerably lower. (It should be noted, however, that adequate sanitation in rural areas does not necessarily require hookups to houses. Much improvement can be achieved through public information and health education campaigns).

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34 IBRD 1998, op. cit.
3.39 The state, through its ownership of the state water and sewer utility, bears primary responsibility for the water and sanitation in Bahia. At present, it is investing heavily in urban water and sanitation. The largest such undertaking is the Bahia Azul program, with an estimated cost of US$ 600 million. The project is extending sewerage in Salvador and the eleven other municipios surrounding the Baia de Todos os Santos. When completed, coverage is expected to reach 80% in the affected jurisdictions.

### Table 12 Water and Sewerage Coverage

<table>
<thead>
<tr>
<th></th>
<th>Household Income</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2 minimum</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>salaries</td>
<td>households</td>
</tr>
<tr>
<td>Metro Salvador</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With piped water</td>
<td>83%</td>
<td>92%</td>
</tr>
<tr>
<td>With piped sewerage</td>
<td>31%</td>
<td>39%</td>
</tr>
<tr>
<td>All Urban</td>
<td>51%</td>
<td>63%</td>
</tr>
<tr>
<td>with piped water</td>
<td>70%</td>
<td>83%</td>
</tr>
<tr>
<td>with piped sewerage</td>
<td>19%</td>
<td>28%</td>
</tr>
<tr>
<td>Rural</td>
<td>49%</td>
<td>37%</td>
</tr>
<tr>
<td>with piped water</td>
<td>22%</td>
<td>26%</td>
</tr>
<tr>
<td>with piped sewerage</td>
<td>7%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: 1998 PNAD

3.40 Health Services Problems in the system of delivery of health services are also responsible for Bahia's poor health performance. In physical terms, the supply of health services in Bahia consists of state and municipal facilities (clinics, general hospitals, specialized hospitals) and private facilities. There are 28,191 hospital beds in the state, of which 60% are private and 40% are public. There are 66 public hospitals (state and municipal), 49 philanthropic hospitals and 97 private hospitals. Ambulatory care is provided by a large number of facilities including health posts, health centers, childbirth centers, and specialized health centers, of which 68% are public.

3.41 The key to accessing the health care system lies in the hands of the federal government, specifically the national system of health insurance. The Brazilian Constitution of 1988 established a universal right to free health services to be provided by the public sector. To operationalize this mandate, Law 8080 of 1990 created the Unified Health System (Sistema Único de Saúde), or SUS. SUS is a prospective payment systems that reimburses private and public providers for specific treatments based on a fee schedule set by the Ministry of Health. It is largely financed from general federal taxation. The majority of care is delivered by private providers who compete for patients. Publicly-owned hospitals and clinics also participate in the SUS and draw a significant proportion of their revenues from it. Providers are reimbursed on the basis of production (based on diagnosis-related groups). SUS is the sole source of publicly subsidized health care for 110 million Brazilians. In the case of Bahia, the SUS is responsible for providing and financing health care to 10.7 million people (82% of the total population) who are not covered by the private insurance industry.

35 In addition to direct reimbursements to providers, SUS provides earmarked funds for specific programs. One example is a per-capita transfer for primary care (Piso Assistencial Básico) which finances a list of cost-effective basic interventions at a level that equaled $10 per-capita in 1998. Others include the Community Health Agent Program (PACS), Family Health Program (PSF), the Basic Drug Program (PFB) and Nutrition Program. These programs provide preventive and primary care services to the poorest segments of the population, especially to women and children.

36 Private health insurance plays a significant complementary role for about 38 million people (26 percent of the population).
3.42 SUS has had its start-up problems. The constitutional mandate to provide universal free health care proved to be fiscally unsustainable. As a result, by the mid-1990's reimbursements of private providers were far out of line with the average cost of services. Reimbursement schedules only covered 40 to 50 percent of costs, and the Government often paid providers with delays of three to six months. Due to persistent under-financing, philanthropic hospitals, which were the backbone of the SUS, were closing entire units, going out of business, or canceling their public service contracts, while public hospitals were left decaying and without essential inputs, leaving the poor without recourse to health care. Private providers attempted to recover the full cost of the services they provided by submitting fraudulent claims.

3.43 The Federal government responded by establishing a rationing system, whereby each state is allocated an annual ceiling for SUS funding. Each state governor has the power to allocate this amount among all the facilities in his jurisdiction—state or municipal; private or public. (As discussed in the box below, further decentralization of SUS budgeting has occurred in some jurisdictions.) Since then, the government has made additional reforms. First, it narrowed the scope of interventions, defining a limited list of the most cost-effective interventions which will be fully reimbursed starting in 1996. Second, it has introduced legislation which will allow cost recovery of care provided to privately-insured patients. Third, it increased funding. This permitted an initial increase in the provider reimbursement rates of 25 percent.37

37 Congress is now debating a constitutional amendment that would lock in higher levels of federal spending. The amendment also mandates increased contributions from state and municipal revenues.
3.44 Solving the SUS financial problem did not, by itself, improve the quality of health services provided to Bahia's poor. Access was also an issue. Because SUS funds are allocated to facilities, they go to places where facilities already exist. In the early 1990s,

\[
\text{Secondary and Tertiary Health Care}^{38}
\]

The state construction boom did not extend to secondary and tertiary facilities in the interior. Should it have?

The increased availability of primary care has generated additional demand for more secondary and tertiary treatment. Since most of the state's secondary and tertiary infrastructure is concentrated in a few developed regions, people from the interior have no access to these kinds of services or have to travel long distances to receive them. A pre-investment study carried out by the SESAB measured gaps in health care based on supply standards.\(^39\) The study reveals that nine of the 15 state socioeconomic regions are below the standard for secondary care and 6 out of the 15 state economic regions are below the standard for hospital beds.

But the state cannot afford to operate a cancer hospital in every municipio. Instead, the government's strategy is to optimize the use of scarce and costly infrastructure through the implementation of health micro-regions. Under this arrangement, all the health providers (primary, secondary, tertiary, public and private) within a given geographical areas will be organized into a coordinated network with clear referral systems. The microregions will be managed by a municipal consortium, reporting to SESAB through management agreements.

health care facilities in Bahia, outside of Salvador, were scarce. The state responded through a massive program of clinic and hospital construction. Between 1990 and 1997, the number of public sector hospital beds increased by 286\(^{40}\).

3.45 Having greatly expanded the number of facilities, Bahia now confronts a management problem. A recent report on public hospital performance faults Bahia's hospitals for low occupancy rates, long lengths of stay, and low ambulatory activity.\(^41\) The state's hospital maternal fatality rate is 4.2 deaths per 10,000 deliveries, one of the highest in the country. Underlying this are weakness in management and training, difficulties in recruiting and motivating professional staff (particularly in rural areas), and lingering financial problems. The system suffers from lack of coordination between ambulatory and hospital care. People are admitted into hospitals without first being evaluated in ambulatory facilities, where, in many cases, they could have been treated.

\(^{38}\) The SESAB defines secondary care as specialized ambulatory centers and small hospitals. Tertiary care includes specialized hospitals and large general hospitals that serve as referral centers.\(^35\) SESAB. Estudo de Pre-Investimento para o Setor Saúde no estado da Bahia, Salvador, Outubro 1998

\(^{40}\) The number of private hospital beds increased by only 29\% over this period. As a result, the total increase in beds was 77\%.

\(^{41}\) Spagnolo de la Torre., Eduardo; 1998; Proyecto de Reforma del Sector de Salud, Estado de Bahia, Fortalecimiento Gerencial de los Hospitales: Sugerencias y Recomendaciones. mimeo
3.46 The state intends to address these problems. The restructuring of the state health secretariat—begun in 1999—is aimed at improving the regulation, monitoring and financing of the state health system. In the regulatory area the government is aiming at improving strategic planning and programming, improving auditing, licensing and accreditation of health facilities; and developing norms and protocols for service provision supported by evidence-based medicine. The government’s reform program is also emphasizing technical assistance and training of health personnel, as well as improving the compensation system. In the financing area, the reform program intends to improve the costing and cost-effectiveness of interventions; exploring new alternatives for financing and paying health services; developing a new formula for allocating financial resources within the state in order to improve equity; and developing the instruments and systems required to charge privately insured patients for services. The state is also experimenting with the privatization or corporatization of publicly owned facilities, through legal arrangements such as organizações sociais. (These are private, not-for-profit organizations, operating under management contracts, which manage public infrastructure using government funds.) As in the case of education, these are extremely promising efforts at reform. To have an impact, however, they will need to be scaled-up.
Decentralizing Health Care

National legislation provides for the decentralization of health care to the municipal level. Decentralization has two different meanings in this context. First, it means the transfer of state assets—hospitals and clinics—to municipal governments. Second, it means the transfer of management control over the allocation of SUS funds. Two stages of SUS decentralization are authorized. Basic care management (Gestão Plena de Atenção Básica) allows municipalities to manage the assets and SUS funding for primary care within their jurisdiction. The second stage, Gestão Plena do Sistema Municipal, allows municipalities to manage the entire range of health care facilities. As of September 1999, 96% of Bahia municipalities had achieved the status of first-stage decentralization; ten had achieved second-stage status. Seventy-three percent of public health facilities—largely consisting of health centers and health posts—have been transferred to the municipalities.

This pace and scale of decentralization has raised several concerns among some policy makers. Some doubt the technical and administrative capacity of municipalities. A recent report by the MOH’s Auditing Department denounces municipal deficiencies in the areas of planning and programming, accounting and financial control, and general management and management information systems. It also expresses concern about the availability of municipal counterpart funding and the misuse of public funds. Concerns have also been raised about high administrative costs, losses of economies of scale, and fragmentation that may arise from the small size of many of Bahia’s municipalities. (Sixty-three percent of the municipalities in Bahia have less than 20,000 inhabitants.)

Doubts have also been raised about the ability of SESAB to shift from a production to a supervisory role. As has been documented in several recent studies, the state health secretariat is oriented to the direct provision of services. It embodies a strong culture of centralization. To date, its own record in managing third party relationships is poor. Most “contracting” to the private sector occurs without formal contracts or with obsolete contracts inherited from the old social security institution. At this time SESAB has no system to monitor performance of municipal health care. SUS transfers, for example, are made without a clear linkage to performance and outcome indicators.

ROAD INFRASTRUCTURE

3.47 Road transport is critical to the economy of the state. Highways account for the majority of cargo transport and nearly all passenger land transport in Bahia. They provide the means through which commercial agricultural exports reach the national and international markets, the primary link between Bahia and the south, and the principal mechanism for tying the internal market of Bahia together.

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43World Bank, 1998; The Organization, Delivery, and Financing of Health Care in Brazil: Agenda for the 90s; Report No. 12655-BR; Vilaga M., Eugenio; 1998; Um Projeto Para O Sistema Público de Serviços de Saúde da Bahia – Período 1999/2002; mimeo
3.48 The principal highways in Bahia fall under federal jurisdiction. The trunk highway network presently consists of 4000 km of federal highways under the jurisdiction of national highway department (DNER). These are complemented by 8440 km of paved secondary and feeder roads under the jurisdiction of the state (DERBA). The state also manages 4,341 gravel roads and 6,333 km of dirt roads.  

3.49 The most serious deficiencies in the road network lie in the federal system. This is partly attributable to changes in the system of highway financing. The major federal highways in Bahia were built during the 1960’s and 1970’s and were financed from earmarked federal gasoline taxes. Under the 1988 constitution, the federal fuel tax was effectively transferred to the states. The federal tax was abolished and its base incorporated in the state value added tax (where it was no longer earmarked). DNER’s budget was thereupon cut drastically, resulting in an extended period of deferred maintenance.  

3.50 DNER also suffers from management problems. DNER’s chronic funding problems have gradually weakened its capacity to plan and manage an extensive highway network effectively. The lack of management continuity, as well as inadequate staff compensation, management and development policies, have resulted in low staff motivation and accountability. While DNER has a tradition of contracting out capital works and maintenance operations to private contractors, the complexity of these contracts, which involve many items of works in small quantities, and the insufficient capacity of DNER to effectively supervise such contracts and control the quantity and quality of the works on site, have led to numerous contract modifications and price increases.  

3.51 The state network, in contrast, is in relatively good condition. Although the coverage of paved roads is relatively low, the roads that exist are generally well maintained. Eighty percent of the paved roads under DERBA’s jurisdiction are considered to be in good condition. Nevertheless, there remain some important gaps in paved connections within the secondary network and a lack of paved connections to some growing economic centers.  

3.52 The state is not without means to improve the federal system. The Federal government intends to solve part of its financing problem by decentralizing part of the federal highway network to the state. Under the proposed decentralization program, the federal government would retain those parts of the highway network that connect state capitals, link with other major modes of transport, promote international commerce, or ensure national defense and safety. The remaining parts of the network would be

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44 This includes 780 km of federal highways delegated to the state and 708 km of highways which appear on the federal highway program but were constructed at the initiative and expense of the state.
45 World Bank; 1997; Federal Highway Rehabilitation and Decentralization Project Staff Appraisal Report; Report No. 16425-BR; Washington DC.
46 In Bahia, there are 20 km of paved road per 1000 km² of land area, as opposed to 45 in Mexico, 102 in São Paulo and 650 in Spain.
47 IDB, 1999, Brasil: Programa de Integracion de los Corredores Viales del Estado de Bahia, mimeo, Washington DC.
transferred to their respective states. Prior to decentralization, the federal government would rehabilitate the highways at its own expense. Highways would then be transferred without further compensation.

3.53 In Bahia, the federal government intends to decentralize 929 km of highways, increasing the paved mileage under state responsibility by about ten percent. While this represents an eventual increase in maintenance costs (as the state is required to maintain the formerly-federal highways) the state government would be well advised to take up the offer. The alternative is to wait until federal money for rehabilitation becomes available. Given the low priority that will be attached to these highways once they are rejected by the state and the tight constraints on federal spending, the wait may be interminable.

3.54 The remaining federal highways are still a problem. Although the federal government is committed to rehabilitating them and improving their maintenance, it is not clear that it is going to have the money in the near future, nor is its record at managing road projects particularly encouraging. In the most recent federal budget, funding for federal highway maintenance was cut sharply. What can the state do? In principle it could use its political representation in Brasilia to pressure for budget resources. It is not however, appropriate for a report of this kind to recommend reallocations of the federal budget—either across sectors or among states.

3.55 There is, however, a more budget-neutral approach available to the state: it can encourage management reforms within DNER. One such reform would be the use of performance based maintenance management contracts. DNER is now experimenting with these in other states. The state could encourage the local office of DNER to begin this experiment in Bahia.

RURAL DEVELOPMENT

3.56 Rural development—programs aimed at improving the economic prospects of the rural poor—have generally fallen under the purview of the federal government. It has not been notably successful.

3.57 As noted earlier, the lack of continuous access to productive land has historically been the greatest single cause of poverty in the rural Northeast. Federal policy has inadvertently contributed to this problem. Renting and sharecropping are typical forms of temporary access to land. In Brazil, agricultural legislation sets ceilings on rents and crop shares and provides nearly permanent rights to tenants after a few years. This has made such arrangements unattractive to large property owners. In addition, federal laws threaten expropriation in areas with a high incidence of renters, sharecroppers, and

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48 Minas Gerais, Rio Grande do Sul and Parana, which account for 75% of the mileage to be decentralized, have already signed decentralization agreements with the federal government.

49 Kutscher, Gary P. and Pasquale Scandizzo, 1981; The Agricultural Economy of Northeast Brazil; Baltimore: Johns Hopkins University Press
squatters—discouraging such practices. Labor laws also have an anti-sharecropping bias. Under informal or verbal sharecropping contracts—which are widespread—landlords risk having sharecroppers claim rights granted by labor legislation. Federal programs aimed at forcing the pace of land redistribution through condemnation and resale exist, but appear to have little impact in Bahia. (Most of the federal land distribution have been directed at the colonization of the Amazon, where the principal participants have been landless laborers from the South.)

3.58 Credit Credit has also been an important element of the federal government’s agricultural policy. Little of it has reached the poor, however. Since the 1970’s, agriculture has been the beneficiary of massive credit programs. These have been heavily subsidized. For two decades, loans for farming activities charged negative real interest rates. Debt recovery was also lax. In the second half of the 1970s, borrowers paid, on average, less than 50% of what they had received. By the late 1970’s government rural credit programs were transferring an amount equal to 18% of agricultural GDP into the sector.

3.59 Little of this has reached the poor, however. The actions of the National Rural Credit System (Sistema Nacional de Crédito Rural - SNCR) are—in the words of a recent presidential report—a “chronicle of exclusion: less than 20% of rural settlements had access to the system’s financing.” The majority government spending on other agricultural programs, such as minimum

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Agricultural Credit Policies Block Poor Farmer’s Access to Land

Federal credit and tax policies affect the poorer rural population’s access to land in a perverse way. The value of subsidies provided through agricultural credit policies in the 1960s and 1970s was capitalized into the price of land, which more than tripled in the 1970’s and rose by another 40% in the 1980’s. The rural poor did not benefit from these higher prices, as most land was owned by wealthier households. (The possibility of diverting some credit to other more attractive investments also increased price of land.) Agricultural land became a tax haven for wealthy investors, which increased in priced and reduced its accessibility to poorer households unable to take advantage of the federal tax and credit regimes.

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50 World Bank; 1995; *Brazil, A Poverty Assessment*, Report No. 14323; Washington DC
51 World Bank; 1995; *Brazil, A Poverty Assessment*, Report No. 14323; Washington DC
52 Office of the President, Government of Brazil; 1997; *Reforma Agraria: Compromisso de Todos*; planalto website
53 According to the presidential report, the federal government has recently taken steps to improve small-farmer access to credit. The Cardoso administration’s PRONAF program provides credit at subsidized interest rates to small family farmers -- owners, squatters, renters or sharecroppers -- and to production cooperatives and associations as long as they are formed by small producers. The borrowers can use these resources to cover investment projects, current expenses or working capital. The ceiling for individual financing varies from R$5,000 for operating expenses, with a two-year repayment term, to R$15,000 for investments, with a repayment term of five years and an 18-month grace period. For cooperatives and associations, the ceiling is fixed as a function of the number of members. The resources come from bank credits, from the constitutional funds of the north and northeast, and from the Worker Support Fund (*Fundo de Amparo ao Trabalhador - FAT*), which is directed by a council representing the government, the workers and the private sector and is coordinated by the Ministry of Labor. The Bank of Brazil and the Bank of the Northeast operate the program.
prices, farm insurance, storage, technical assistance and research, flowed directly or indirectly to the largest property owners.

3.60 In lieu of land reform, the federal government has launched a number of special regional development programs aimed at addressing rural poverty. In 1985, for example, the federal government launched the Rural Development Program (NRDP). NRDP, as originally designed, was a complex federally-administered ten-state effort including (1) water resources development, including irrigation; (2) agricultural research and seed production; (3) agricultural extension (technical assistance) for basic food and commercial crops and small livestock; (4) agricultural credit for investments in crop and livestock production and water resource development; (5) marketing services, and (6) support to small rural communities to finance small rural investments by farmer groups for production, processing, and rural infrastructure (APCR). Through 1993, with the exception of the APCR component, implementation of the NRDP lagged behind schedule. In part this was due to the macroeconomic environment in which the projects were implemented: 1985-94 was a period of economic stagnation and high rates of inflation. An evaluation of these projects also argued that were too complex, too large, and demanded too much coordination among agencies.

3.61 In 1993, the NRDP was reformulated and transformed in its entirety into a community-based development program. Performance improved markedly. The reformed program relies on rural community to identify prepare, implement, and maintain subprojects that meet their most pressing needs. The majority of projects consist of investments in (1) drinking water supply, consisting of wells or small dams and connections to individual households, and (2) rural electrification—the construction of transmission and distribution lines to be connected to the state grid. (The project provides some financing for productive equipment, such as community tractors—but this constitutes a small proportion of the total.) With the closing of the federal project, Bahia is now continuing the effort under its own auspices. On a smaller scale, the state also operates the Programa Terra Produtiva, which provides water supply and agricultural equipment to small farmers, and Sertão Forte, which installs wells and small irrigation works in the Sertão.

3.62 These programs have been effective in improving the quality of life of the rural poor. They have also proven extremely cost effective. According to a recent Bank report, the net costs of water supply components is virtually nil, after taking into account the foregone costs of trucking-in water during periods of drought. But it is not clear that they fundamentally change the economics of small scale agriculture in Bahia. Given the problem of farm size, the continuing problems of access to credit, and the inherent climatic constraints of much of the Sertão, the role of family farming in a future, prosperous, Bahia would appear to be fairly limited. Historical trends are therefore likely to continue: a large proportion of the rural labor force—or their children—will migrate to urban areas or support themselves with urban jobs while continuing to live in the country. Under these conditions, a principal objective of rural development should be to

54 World Bank; 1996; Brazil Northeast Rural Development Project, Implementation Completion Report; Washington DC
ameliorate the living conditions of those who are either too young or too old to migrate, or who find themselves among the fortunate few with sufficient land or access to off-farm employment to support themselves adequately in situ. While the state government should continue to support rural development, it should also urge the federal government to address the underlying factors that prevent small farmers from increasing their holdings, by amending the land statute, and related labor and agricultural credit policies.

**SOCIAL ASSISTANCE**

3.63 Economic development will not of course, be sufficient to reach every circumstance. The aged, and disabled, abandoned children, and other vulnerable groups will require direct aid from the government. A key element of a successful poverty strategy is social assistance. A growing economy, combined with rising levels of education and adequate health care, can raise the incomes of those who participate in the labor force. Households with gainfully employed members can support members who are not: children, elderly parents, the temporarily unemployed. But government assistance may be required for who fall outside this familial safety net.

3.64 Rural pensions The most important form of social assistance in Bahia is the federal rural pension. Brazil has traditionally had an extensive government-backed retirement system for workers in the so-called formal sector. This provided unemployment insurance and retirement benefits for civil servants and workers in registered firms. The vast majority of Bahia’s work force do not belong in either category, however. As shown in Table 13, only one-quarter of the labor force belong to any form of contributory retirement plan. The proportions are particularly low in sectors that employ the poor. Less than a quarter of workers in personal and domestic service belong to contributory pension systems; less than five percent of agricultural workers do so.

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55 Self-employed professionals may voluntarily participate in the system.
Table 13 Percent of workers contributing to pensions

<table>
<thead>
<tr>
<th>Sector</th>
<th>% contributing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>4%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>47%</td>
</tr>
<tr>
<td>Construction</td>
<td>19%</td>
</tr>
<tr>
<td>Other industries</td>
<td>47%</td>
</tr>
<tr>
<td>Commerce</td>
<td>34%</td>
</tr>
<tr>
<td>Personal, domestic services</td>
<td>23%</td>
</tr>
<tr>
<td>Professional services</td>
<td>58%</td>
</tr>
<tr>
<td>Transport, comm.</td>
<td>48%</td>
</tr>
<tr>
<td>Education, health</td>
<td>72%</td>
</tr>
<tr>
<td>Public administration</td>
<td>76%</td>
</tr>
<tr>
<td>Other</td>
<td>43%</td>
</tr>
<tr>
<td>Total</td>
<td>25%</td>
</tr>
</tbody>
</table>

Source: PNAD 1998

3.65 The 1998 Constitution obliged the federal government to establish a national pension system that would be 'uniform' for both urban and rural workers. In response, the government chose to extend coverage to the entire elderly population, contributory or not. This led to a dramatic increase in retirement payments, particularly for rural areas. Under the present rules, rural workers can retire at age 60 (men) or 55 (women), provided they can prove they have been engaged in rural occupations during the required vesting period. Because levels of rural income are difficult to document, the rural pension payment is fixed at one minimum salary.

3.66 Rural pensioners now constitute an important and growing part of Bahia’s rural population. Between 1992 and 1997, the number of people defined by PNAD as retirees, pensioners, and “other income” grew at an annual rate of 6.4%. As of 1997, it accounted for about ten percent of the total population over 10 years old. Although the level of the benefit is not high, it appears to constitute an important source of household income for poor households in the state’s interior. Recently, there has been discussion at the federal level of abolishing the rural pension, as a cost-saving measure. While there is a critical need for reform in the federal system as a whole, this part of the system should be spared.

3.67 Child labor The state government, jointly with the federal level, also provides support to vulnerable groups among the young. One such program is PETI, a program for the eradication of child labor. PETI is aimed at inducing school aged children engaged in dangerous occupations—such as sisal cutting, rock breaking, and fireworks manufacturing—to return to school. It provides parents with a monthly stipend of Rs25 for keeping their children in school, and provides a matching amount to their schools to provide for extended hours. To date, PETI has reached 30,000 children, largely in the state’s sisal growing region. According to the state Secretariat of Labor and Social Action, this represents about 22% of the number of children working in dangerous occupations (though only eight percent of the total number of child workers).

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56 Ministry of Social Security, Government of Brazil; 2000, website
57 SEI, 1999, Novos Mundos Rurais Bainosa, Serie Estudos e Pesquisas No. 42; Salvador BA
58 World Bank, 1999, Brazil: Critical Issues in Social Security; Report No. 22513; Washington DC
Geographical Targeting: the Faz Cidadao Program

In 1999, the state embarked upon a two year effort to improve the economic prospects and living standards of Bahia’s least-developed municipios. One hundred municipios were chosen on the basis of a matrix of socio-economic indicators. In each municipio, Faz Cidadao begins with the creation of a local council. The council is then responsible for creating a local strategic plan, which sets out actions to be taken by various federal, state, municipal agencies operating within the jurisdiction. In health care, for example, the plan might call for the State Secretariat of Health to establish mobile health units. The Secretariat of Administration might be required to create a mobile legal assistance unit to provide free legal aid. In education, Faz Cidadao might include the training of non-certified teachers in both municipal and state fundamental schools, or management reforms promoted under the state’s Educar para vencer program (see earlier discussion). It can include infrastructure investment (particularly water supply and sewerage) as well as programs to legalize non-governmental organizations. Each party to the strategic plan is required to sign a contract committing itself to implementing its part of the strategy.

Faz Cidadao is an interesting program. It allows for pilot testing a variety of novel approaches to economic development and social assistance. But it is subject to the two weaknesses of any geographically based poverty program. First, it may not be well targeted. Poverty is not a geographically isolated phenomenon in Bahia. The 100 poorest municipalities do not contain a majority—or even a very significant proportion—of Bahia’s poor. (The 100 municipalities in the program have a combined population of 1.4 million, about 12 percent of the state population.) While the proportion of poor families in these jurisdictions may be higher than the state average, it is very unlikely that they constitute a large share of the total.

Second, a development strategy that takes the existing location of population as a given may be unrealistic. Some municipios—including some on the Faz Cidadao list—may have no viable economic activity beyond subsistence agriculture. For the working age population in such locations, the best economic development strategy may be to migrate to more promising sites.
4. FINANCE

4.1 Bahia’s fiscal situation is critical to its growth and poverty reduction efforts for two reasons. First, sound finances are needed to sustain the state’s existing spending commitments—in education, public security, health, and infrastructure. Second, sound finances are an important part of the state’s business climate; a reassurance to investors that services will be provided and that the tax climate will remain stable. Many Brazilian states—including the four largest—experienced severe financial crises during the last decade, requiring sharp cutbacks in spending and massive federal debt relief. Bahia was not among them.

4.2 Bahia’s current fiscal condition reflects a decade of conservative fiscal policy. Most of its fiscal fundamentals are fairly strong. Revenues have grown at roughly the rate of GDP. Fixed expenditures are low, with personnel costs equal to only 55% of net current revenue. Interest obligations (after rescheduling) are less than ten percent of net revenues. But there are problems on the horizon. The debt stock is rising as a percent of revenues. And, like all Brazilian states, Bahia confronts growing pension obligations.

REVENUES

4.3 The state government’s revenues are largely derived from a value added tax, which accounted for about 60% of current revenues in 2000 and formula-based federal transfers, which accounted for another 30%. In the years just preceding the Plano Real, the state also derived a considerable proportion of its revenue from interest. With the decline of inflation, this source of revenue declined. It rose temporarily in the late 1990s, as proceeds from the sale of the state power company were invested, but has since begun to fall. As shown in Table 14 aggregate current revenues climbed briskly in the years immediately following introduction of the Plano Real, but fell off, in real terms, in 1999. Results in 2000 suggest a return to rapid growth.  

| Table 14 Trends in Current Revenues (Mn Rs of 2000) |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| current revenues| 5437            | 5904            | 6195            | 6513            | 6189            | 6286            |
| tax revenues    | 3549            | 3930            | 3758            | 3799            | 3759            | 4076            |
| -ICMS           | 3426            | 3721            | 3496            | 3531            | 3536            | 3839            |
| interest income | 58              | 33              | 244             | 314             | 162             | 89              |
| federal transfers| 1569            | 1661            | 1894            | 1937            | 1947            | 1794            |
| Other           | 261             | 280             | 299             | 463             | 295             | 327             |

Index: IGP-di Source: Balancos do Estado

4.4 The VAT is imposed on the sale or distribution of merchandise and on selected services (principally electricity, telecommunications,

59 Revenues were converted to constant terms on the basis of the IGP-di, which was strongly affected by the devaluation of the Real in early 1999. Other measures, such as the IPCA, would show revenue increase.
and inter-city bus transport). It is subject to two basic rate regimes. The first one, set by
the federal government, governs interstate transactions. It establishes a complex system
of differentiated rates depending on the state of origin and the state of destination. As
shown in Table 15, interstate rates are generally lower than intrastate rates. Rates on
exports from wealthier states to poorer ones are taxed at a lower rate than goods moving
in the opposite direction.

4.5 The second rate regime governs intrastate sales. Intrastate rates are determined by
the state legislature, subject to parameters set by the federal government and agreements
among the finance secretariats of the 26 states. In Bahia, the basic rate on intrastate sales
is 17%. A lower rate is imposed on basic foodstuffs. Higher rates are imposed on fuel,
electricity, telecommunications, alcohol, tobacco and luxury goods.

<table>
<thead>
<tr>
<th>Interstate sales¹</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Bahia to southeastern states</td>
<td>12%</td>
</tr>
<tr>
<td>From southeastern states to Bahia</td>
<td>7%</td>
</tr>
<tr>
<td>Basic rate on intrastate sales</td>
<td>17%</td>
</tr>
<tr>
<td>Basic foods: rice, beans, corn, coffee, pasta, salt, and flour</td>
<td>7%</td>
</tr>
<tr>
<td>Goods sold to small and micro enterprises</td>
<td>7%</td>
</tr>
<tr>
<td>Tobacco, alcoholic beverages</td>
<td>25%</td>
</tr>
<tr>
<td>Luxury goods: sports equipment, jewelry, perfumes, etc.</td>
<td>25%</td>
</tr>
<tr>
<td>Telecommunications, gasoline, electric energy</td>
<td>25%</td>
</tr>
</tbody>
</table>

¹ rates in table refers to transactions between northeastern states (including Bahia) and southeastern states, including São Paulo. Rates among states within each region and among other regions of Brazil vary.

4.6 In general, the VAT is assessed by applying the tax rate to the gross value of goods or
services sold by the firm, less a credit for the VAT paid by suppliers to the firm. This system is
designed to be self-enforcing: since a firm’s tax liability depends on the amount of VAT credits it can deduct, it has an incentive to
demand evidence of VAT payments from its suppliers. But self enforcement depends
upon the effectiveness of tax administration at the retail level—if retailers are not under
pressure to pay the VAT, they have no incentive to demand VAT credits from their
suppliers. Retail VAT administration has proven difficult in Bahia, due to the prevalence
of small scale firms. As a result, the state tends to rely on a relatively small number of
large scale firms for most of its VAT tax revenues.

4.7 Performance The VAT has performed erratically over the last fifteen years. As
shown in the chart above, real revenues⁶⁰ have roughly followed trends in GDP, but with
considerable variation from year to year. inflation and Tanzi effects are clearly part of the
explanation. The VAT has proved vulnerable to inflation, and fell in real terms with the
high rates of inflation in the late 1980’s, rebounding sharply after price stabilization
under the Plano Real. But even after inflation came down, the correspondence between
economic growth and VAT revenues remained weak. Real revenues declined after 1996,

⁶⁰ Adjusted on the basis of the IPCA.
even while GDP continued to grow. More recently, they have soared. Federal tax exemptions Federal policy explains much of the decline of revenues immediately after 1996. Under the so-called "Lei Kandir", introduced in September 1996, the federal government required states to exempt international exports from the VAT and grant tax credits for purchases of capital goods. To compensate the states, the law provided for a federal transfer in lieu of foregone revenues. The amount of compensation falls short of the revenue the state has forgone. As shown in Table 16, net losses from the Lei Kandir equaled 3.9% of gross VAT revenues in 1999.61

| Table 16 Losses Due to Lei Kandir (R$ Mn) |
| --- | --- | --- | --- |
| Exemption of exports | 9 | 52 | 64 | 68 |
| Investment credits | 34 | 169 | 138 | 205 |
| ativo imobilizado | 20 | 103 | 80 | 133 |
| energia elétrica | 12 | 56 | 50 | 61 |
| telecomunicações | 2 | 8 | 8 | 11 |
| Gross loss | 43 | 221 | 202 | 273 |
| Compensation | 18 | 162 | 156 | 157 |
| Net loss | 25 | 59 | 46 | 116 |
| Loss as percent VAT revenue | 1% | 2.3% | 1.7% | 3.9% |
| Fonte: GEIEF, GECEX, SAF |

4.8 Federal policy — along with changing international oil prices — may also explain the most recent turn around in VAT revenues. As shown in Table 17, the most spectacular growth in VAT revenues—in both relative and absolute terms—occurred in two sectors: petroleum and public utilities. These two sectors together account for nearly half of total VAT revenues. (This reflects not so much the importance of petroleum and public utilities in the state’s GDP but rather the ease with which the sectors are taxed—they are imposed on federal and state monopolies—and the relatively high tax rates applied to them.)

---

61 State tax exemptions may explain the slow growth in receipts from chemicals, beverages, food processing, and other manufacturing sectors in those years. As discussed earlier, the state grants such firms VAT deferrals of up 75%, for a period of up to ten years. The impact of these deferrals cannot be determined with the data at hand. First, it is not clear how many of the firms granted incentives actually began operations during the period. Second, the value of deferrals granted to such firms is not available. (Although the state presumably assesses the tax for purposes of calculating the amount to be deferred, it reportedly does not keep track of the total amount of such deferrals in any given year.)
4.9 Together, these two sectors—petroleum and public utilities—accounted for virtually all the growth in VAT receipts in 2000. Much of this increase appears to be due not to rising consumption but to rising prices. Diesel prices are federally controlled. The maximum retail price of diesel increased 60% between February 1999 and July 2000. Increases in the price of gasohol were also important. Although gasohol is not subject to price controls, the price charged to retailers reflects the pricing policies of Petrobras (which in turn reflects international market prices and federal fiscal policies.) As shown in the table below, the retail price on gasohol increased by nearly 60% between March 1999 and July of 2000. Electric energy prices are federally controlled, and showed a marked increase in the second half of 1999. Between June and August of 1999, power prices were increased 17.5%. Telecom prices (for fixed—as opposed to mobile service) are also federally controlled. Prices have increased for this service as well.

4.10 Tax administration Improvements in tax administration may also be a factor. As noted earlier, the VAT is difficult to administer, particularly at the retail level. The system of differential tax rates also creates difficulties in administering the tax, by encouraging evasion. Because interstate rates are much lower than rates on sales within the state, firms have a strong incentive to mislabel goods as interstate exports. High levels of delinquent accounts have also traditionally plagued the state. In 1999, VAT arrears totaled R$ 4.3 billion, 145% of the amount collected on current account during the year.

4.11 The state has made impressive efforts to improve VAT administration. For its largest taxpayers, the state has stepped up efforts to identify underassessments by analyzing discrepancies between volumes of taxable activity and existing tax liabilities. The state has also increased inspections of goods in transit, to identify goods erroneously labeled as exports. It has improved coordination with taxing authorities at the federal and municipal level in order to identify firms now missing from the cadaster of VAT taxpayers. For small scale firms, the state has introduced a simplified system of assessment.

4.12 The state has also stepped up efforts to collect delinquent accounts. In an effort to encourage delinquent taxpayers to settle, the state recently offered an tax amnesty. Legislation has also been enacted (Lei 7438/99) to increase the state’s ability to negotiate administrative settlements with delinquent taxpayers, thus avoiding the time and cost of pursuing delinquents through the courts. These actions do not appear to have
had a major impact yet. In 1999, receipts from overdue taxes (divida ativa) totaled R$33.9 million, about one percent of total tax revenues.

4.13 Prognosis As long as inflation stays under control and the taxable part of the economy grows somewhat, there should be some growth in ICMS tax revenues, under the existing policy framework. It is not clear, however, that the sharp increase in ICMS revenues in 2000 is sustainable. To the extent it resulted from federal price hikes on diesel and electric power and increases in the international price of oil, these increases are one-time events. Within the existing framework of federal legislation, the state will therefore need to continue its efforts to improve coverage and assessment and improve collection of delinquent accounts. In principle, the state could increase revenues by raising intra-state tax rates or reducing exemptions. This could have adverse impacts on the state's competitiveness however.

4.14 Impacts of the Reforma Tributaria In the long term, the solution to the performance problem of the VAT is to widen its base. The VAT base is far from comprehensive. It excludes the majority of service sectors. As described in chapter 1, while the economy expanded—albeit modestly—during the 1990s, sectors subject to the VAT did not. The fastest growing sectors of Bahia's economy were services; particularly construction, communications, public administration, and housing and professional services. All four sectors grew by more than ten percent per year in real terms during the 1990s. Of the four, only communications is subject to the VAT. Much of the core of the VAT base stagnated. While commerce grew at an average annual rate of four percent, commerce grew by only one percent.

4.15 As noted earlier, the production and distribution of goods are no longer the principal basis of modern economies. Instead, services are. Fortunately, the long term may be arriving in Brazil. Under the proposed reforma tributaria, taxes on services, now imposed at the municipal level, would be combined into a single comprehensive value added tax, imposed by both federal and state governments. (Municipalities would be assigned a separate retail sales tax.) If, in fact, the reform is successful in extending the VAT base to the service sector, the state's revenues should grow in parallel with the state's economy.

4.16 But the Reforma Tributaria has another, less positive, implication for Bahia. Under the proposal, the rate on interstate sales will be reduced to zero. This has important implications. By eliminating the tax on interstate sales, the reform will change the VAT from a partially origin-based tax to destination-based tax. In other words, the tax will be imposed in the state where the good is consumed, rather than where it is produced. Under the present system, part of the VAT on goods destined for interstate export is retained in the state of production. When Bahia imports a good from São Paulo,

62 Part of the reason for the decline in revenues in 1997 was the exhaustion of a boom in the purchase of consumer durables that followed the introduction of the Real Plan. By raising real incomes—particularly at lower levels—and stabilizing prices, the Plano Real set off a boom in the purchase of consumer durables in the second half of 1994 and in 1995. By 1997, with rising real interest rates and a slowdown in the economy, this boom had largely run its course.

63 Under the proposal, an federal VAT would be imposed on interstate sales in order to discourage evasion. Proceeds of the federal VAT would be refunded to the destination state.
for example, São Paulo retains seven percent of the VAT generated, allowing Bahia to tax only the difference between the intra-state and interstate rate plus the VAT on subsequent stages of distribution within Bahia. Under the proposed reform, Bahia would be able to tax 100% of the value added on products sold within its boundaries, regardless of their origin.

4.17 For most Northeastern states, the Reforma Tributaria this will be a boon. But for Bahia, it will be a mixed blessing. Unlike the other Northeastern states, Bahia is a net exporter of goods to the rest of Brazil. The value of its intermediate inputs to manufacturing exceeds the value of its imports of finished products. While cutting the interstate rate to zero will enable Bahia to tax 100% of the value added in goods imported from São Paulo, it will also force Bahia to give up the VAT it charges on exports to São Paulo. In this respect, Bahia will be giving up more than it is getting. As noted earlier, the existing rate on exports from São Paulo is Bahia is only 7%, while the rate on exports from Bahia to São Paulo is 12%.

4.18 The combined effect of the Reforma Tributaria is nevertheless likely to be positive for Bahia. Over the long run, the expansion of the tax base to services will likely outweigh the net impact of changes in the taxation of interstate sales.

Federal Transfers

4.19 Bahia derives about 30% of its revenues from federal transfers, the majority of which are formula-driven federal revenue sharing schemes. The largest of these—accounting for 75% of 2000 transfer revenues—is the so-called state participation fund, the FPE. Revenues of the FPE are derived from fixed shares of federal income- and industrial products taxes and are distributed among the states on the basis of population and the inverse of per capita income. The state also derives a significant amount of transfer revenues from compensation funds for federally imposed VAT exemptions and credits (including compensation for the Lei Kandir), health care costs eligible for SUS reimbursements; and earmarked funds for education (the so-called salário educação and a share of federal Fundef transfers). The state is also allowed to retain the federal income tax payable by its employees. As the principal transfers are based on fixed shares of specific federal taxes, Bahia’s transfer revenues are likely to track changes in federal tax receipts.

<table>
<thead>
<tr>
<th>Table 19 Sources of Transfer Revenues</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 Mn R$ Percent of total</td>
<td></td>
</tr>
<tr>
<td>State participation fund</td>
<td>1346.9</td>
</tr>
<tr>
<td>IPI-exportações</td>
<td>97.7</td>
</tr>
<tr>
<td>Lei Kandir compensation</td>
<td>107.7</td>
</tr>
<tr>
<td>Other formula based transfers</td>
<td>159.5</td>
</tr>
<tr>
<td>Convenios</td>
<td>118.3</td>
</tr>
<tr>
<td>Other transfers</td>
<td>4.4</td>
</tr>
<tr>
<td>Total transfers</td>
<td>1830.6</td>
</tr>
</tbody>
</table>

Source: 2000 Balanco Geral do Estado

64 Beginning in the year 2000, SUS receipts ceased to be include in the general revenues of the state.
Expenditure

4.20 With its revenues growing slowly during the late 1990's, Bahia's fiscal condition has largely depended on its ability to control expenditures. In this respect, it has succeeded. As shown in Table 20 except for one-time costs of recapitalizing the state banks in 1999 (discussed below) total spending has increased only modestly between 1996 and 1999, paralleling the slow growth in current revenues.
4.21 How was this accomplished? Personnel is Bahia’s largest single item of expenditure. Rising personnel costs nearly bankrupted many states in the mid-1990’s. To understand Bahia’s personnel policies, it is important to understand the context in which they are made. The ability of states to control personnel costs is constrained by Brazil’s 1988 Constitution. Prior to 1988, state staff could be employed under either of two legal regimes. The statutory regime conferred a wide range of civil service benefits and rights, including a protection against dismissal (except for cause) and pension benefits equal to 100% of exit salaries (the so-called salario integral). The consolidated labor law (CLT) regime allowed for dismissal without cause (although it established compensation requirements). The pensions of statutory staff were paid directly from the state treasury. State pension obligations to CLT staff were limited to a 21% payroll contribution to the national social security system (INSS).

4.22 The 1988 Constitution altered the picture in two important respects. First, it required states (along with all other government bodies) to adopt a single regime for their employees. In effect, states were required to absorb former CLTistas into the statutory regime, with all the benefits and rights pertaining thereto. Second, it expanded civil service benefits, in particular prohibiting states from lowering salaries.

4.23 The fiscal impacts of the 1988 Constitution did not materialize immediately. The adoption of the regime unico in fact reduced the state’s immediate pension expenditures. By converting staff from CLT to statutory status, the state was no longer required to contribute to the INSS. It was, however, required to take on the obligation to pay retirement benefits to former CLTistas once they retired. In converting staff from CLT to statutory status, the state therefore reduced its immediate personnel costs but gained a long term liability.

4.24 By the same token, the constitutional prohibitions on reductions in salaries and dismissal without cause had a delayed impact. States managed to accommodate these changes as long as inflation rates were high. Although the Constitution prohibited reductions in nominal salaries, it did not rule out reductions in real terms. As long as double- and triple-digit inflation prevailed, states could control salary costs by delaying adjustments in nominal salaries. With the decline in inflation following the Plano Real,

<table>
<thead>
<tr>
<th>Table 20 Trends in Current and Capital Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Mn R$ of 2000</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>current expenditures</td>
</tr>
<tr>
<td>4763  5362  5777  6138  5906  5179</td>
</tr>
<tr>
<td>personnel</td>
</tr>
<tr>
<td>2533  2708  2882  2993  2831  2350</td>
</tr>
<tr>
<td>interest</td>
</tr>
<tr>
<td>340   347   387   452   458   448</td>
</tr>
<tr>
<td>transfers to muns.</td>
</tr>
<tr>
<td>928   1025  982   961   1046   1053</td>
</tr>
<tr>
<td>other current</td>
</tr>
<tr>
<td>962   1282  1526  1732  1571   1328</td>
</tr>
<tr>
<td>capital expenditures</td>
</tr>
<tr>
<td>1758  1507  1680  4816  1575   1468</td>
</tr>
<tr>
<td>physical investment</td>
</tr>
<tr>
<td>739   696   1167  1169  901    841</td>
</tr>
<tr>
<td>financial investment</td>
</tr>
<tr>
<td>142   176   104   2177  135   343</td>
</tr>
<tr>
<td>amortization</td>
</tr>
<tr>
<td>776   559   367   912   538   283</td>
</tr>
<tr>
<td>other capital</td>
</tr>
<tr>
<td>101   76    42    558    1     1</td>
</tr>
</tbody>
</table>

Notes: (1) personnel costs exclude disbursements to retirees by Funprev (2) amortization payments in 1996 and 1997 largely consist of bond rollovers (3) financial investments in 1998 include of costs associated with sale of bank

50
this instrument of fiscal control ended. Many states—including the four largest—found
themselves with personnel costs in excess of 80% of revenues.

4.25 Bahia did not. The state appears to have avoided a post-Real personnel crisis in
part by having adopted a conservative personnel policy before the Real plan went into
effect. According to state figures, personnel expenses were only 48% of net current
revenues in 1994. The state also adjusted quickly to post-inflationary conditions. Shortly
after the Plano Real went into effect, the state introduced a voluntary departure program
(programa de demissão voluntaria) allowing staff to quit in return for a one-time
compensation package. Twelve thousand staff reportedly took advantage of the program.
The state also permitted staff to take standby status (disponibilidade proporcional) in
return for partial wage reductions. Wage increases in the post-Real period were confined
to front-line staff (teachers in the classroom, policemen on the street), and were granted
in the form of bonuses (condicoes especiais de trabalho) rather than general salary
increases, so as to avoid increasing the base on which retirement benefits are determined.

4.26 More recently, the state has taken measures to extend the working hours of
existing staff in return for increased compensation. This permits the state to avoid hiring
additional staff, with the training costs—and eventual retirement costs—that this would
imply. Staff receive a salary bonus of up to 150% (in the lowest salary categories) if they
agree to work longer than the required six hours and a bonus if they continue to work
beyond the required eligibility date for retirement. (The latter benefit extends only to
members of the military police (where the bonus is 20%) and teachers in the classroom
(where the benefit is 80%).

4.27 Recent amendments to the federal Constitution will increase the state’s ability to
dismiss staff and reduce salaries. The 19th Amendment (April 1998) abolishes the
requirement of a single employment regime, opening the door for an eventual return to a
mix of private sector and public sector regimes. The 19th amendment also grants states (as
well as other government bodies) temporary authority to dismiss civil servants, provided
certain conditions are met: (1) personnel costs must exceed a threshold established in
complementary legislation (the so-called Lei Camata); (2) at least 20% of positions filled
by political appointment (cargos de confianza) have been eliminated; and (3) non-
confirmed civil servants have been dismissed. Because Bahia is below the Camata
thresholds, it cannot take advantage of these provisions.

4.28 The impact of the amendment will be a long time coming, however, as it only
applies to staff hired after the amendment went into effect. There is also a distinct
possibility that certain categories of staff may be excluded. Congress is still debating
implementing legislation that would define which categories of staff may be hired under
the CLT system, and which must be hired as civil servants.

4.29 Within the existing legal framework, the state is nevertheless expanding the
proportion of CLT staff on its payroll, by hiring personnel as contractors rather than as
employees. In the most recently opened state hospitals, for example, staffing is provided
by private firms. Even in its existing hospitals, the state is attempting to increase the
proportion of privately-employed staff. While existing statutory employees cannot be
dismissed, the management of some hospitals has been contracted out to private operators.
on the condition that the operator retain only 60% of existing staff. (The state intends to retire the remainder through voluntary dismissal programs.)

### Table 21 Trends in Personnel Costs

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>61%</td>
<td>59%</td>
<td>58%</td>
<td>56%</td>
<td>59%</td>
</tr>
<tr>
<td><strong>active</strong></td>
<td>45%</td>
<td>45%</td>
<td>42%</td>
<td>46%</td>
<td>46%</td>
</tr>
<tr>
<td><strong>inactive</strong></td>
<td>13%</td>
<td>13%</td>
<td>14%</td>
<td>15%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Source: Secretaria da Fazenda files

Note: Payments to retired staff include transfers from general state revenues to FUNPREV in 1996 and 1999, but exclude payments financed from FUNPREV assets.

4.30 These measures have helped restrain expenditures on active (as opposed to retired) staff. As shown in Table 21, expenditures on active staff increased, although falling, still consume 45% of net current revenues. Pressures for increases in the active wage bill are likely to continue. Given the state’s plans to expand secondary education, limits on the growth of public employment may be hard to maintain. Wage restraints may also become untenable. As discussed below, the state is in the process of more-than-doubling employees’ retirement contributions. This is likely to create pressure for compensatory salary increases. Economic growth is also likely to put pressure on wages. With wages rising in the private sector, existing employees will become restive; new staff will become difficult to attract.

### Pension Liabilities

4.31 Retirement costs are a modest but rapidly growing claim on Bahia’s resources. In 1997, payments to retirees equaled thirteen percent of total personnel costs. By 2000, the proportion had ostensibly not increased. Data for 1998-2000, however, exclude pensions financed by drawing down the assets of the state pension fund (see below). If these expenditures are included, spending on pensions may have been as high as 24% of net current revenues. A state-contracted actuarial study estimated that this percentage will increase to 50% in 2011.

4.32 What is the cause of this looming pension bomb? There are two factors involved. First, under federal law, retirement benefits for statutory employees are quite generous in Brazil. Under the terms of the 1988 Constitution, pension benefits are fixed at 100% of exit salaries and are indexed to increases in the position vacated by the retiree. Eligibility criteria for retirement are quite liberal. Until recent amendments, male non-teaching staff were allowed to retire after 35 years of service. Female non-teaching staff could retire after 30 years. Teachers of either sex were given an additional five years’ dispensation. Service, in this case, meant employment in any formal sector position. Thus a staff member could join the state after many years of employment elsewhere, and expect to be fully vested.

4.33 Second, the number of retirees is increasing rapidly. Because the 1988 Constitution required states to adopt a regime unico, these benefits now extend to all state personnel. Staff who would otherwise be retiring as CLTistas with pensions paid by the federal retirement system now have to be paid by the state. The state therefore faces the
prospect not only of pension obligations to a growing number of long term statutory employees but also rapid increase in obligation to retired former-CLTistas.

4.34 The state has taken several measures to address this threat. Recent wage increases have taken the form of bonuses (gratificoes) rather than adjustments to the salary base, thus avoiding any increase in the pension base. The state has also successfully sought compensation from the Federal social security system (INSS) for the pension costs of former CLTistas who were transferred to state responsibility under the terms of the 1988 Constitution.

4.35 Much of the state's hopes are pinned on newly created pension fund, termed Funprev. Under its initial plan, Funprev was to cover only new retirees and ten percent of the stock of existing retirees, the latter percentage to increase gradually over time. The remaining existing retirees would continue to be paid from general treasury funds. Funprev is financed from three sources of revenues. The first is payroll deductions from staff. Existing employee deductions for the state dependent survivors' fund (IAPSEB) were abolished and replaced by a five percent deduction assigned to Funprev. (The wages of both active and retired staff are subject to this deduction, recent Supreme Court rulings to the contrary notwithstanding.) These deductions are to increase by 1.5 percentage points annually until they reached 12% in 2004. Funprev's second is matching state contributions, starting at 5% and increasing in 1.5 percentage point increments until they reached 21% in 2012. (The state recently opted to increase the state contribution to Funprev to 15%, beginning in 2002.)

4.36 Funprev's third source of income is earnings on assets. Funprev began business in April 1998, with an initial capitalization of Rs$ 453 million. Of this, Rs 400 mn was derived from sale of the state power company (Coelba). The remainder consisted of real estate assets transferred from IAPSEB. (The latter were subsequently transferred from FUNPREV to the state.) In November 1999, the state obtained a Rs$450 mn advance from the federal savings bank (CEF) against expected proceeds from the sale of the state water company, EMBASA. Although EMBASA has not been sold, proceeds from the advance continue to appear as assets of FUNPREV. The state also hopes to add to the funds assets by securitizing the flow of oil royalties.

4.37 This plan was implemented as planned, beginning in April 1998. In December 1999, however, the state altered the arrangement, requiring Funprev to assume responsibility for 100% of the state's retirees. To compensate Funprev, the state provided a recurrent subsidy. This was insufficient to cover the increase in the fund's costs, however. As a result, Funprev has been forced to draw down capital. This solution—drawing down capital to pay retirement costs—is obviously not tenable in the long term. With Coelba already sold and EMBASA on the block the state is running out of new sources of capital to replenish the fund.
4.38 In considering solutions to the state’s pension problem, it is useful to step back and consider the fundamental problems with the system. There are two. First, the benefits are excessive. In guaranteeing the *salario integral* to even the most highly paid staff, the state has taken on an impossible financial burden. The state’s efforts to increase funding and reduce benefits (in the sense of forcing existing retirees to contribute), are a step in the direction of solving this problem. The increase in employee deductions is, in effect, a tax on employees, retirees, and survivors which the state can use to pay pensions. (Although the state’s contribution is also scheduled to increase, this obviously does not represent a net increase in state resources, merely a reclassification.) Earnings on assets may also be considered a net increase in resources, if one assumes that the state would have otherwise used the *Coelba* proceeds unproductively. To this extent, Funprev may help alleviate some of the costs of the state’s growing retirement obligations. But increasing the revenues available for retirement does not address the fundamental problem: the generosity of retirement benefits. Any solution that focuses solely on increasing resources is likely to be untenable.

4.39 Second, the existing pension structure imposes unnecessary risks, both on the state and on its employees. Because the entire pension is based on defined benefits (rather than defined contributions) the risks of the pension plan rest entirely with the state, rather than its employees. (Employees, of course, are exposed to the unnecessary risk that the state will renege on its obligations.) Because Funprev is a dependency of the state, it is vulnerable abrupt changes in rules. This vulnerability tends to stiffen staff resistance to any reduction in nominal benefits. Generous *nominal* benefits are considered compensation for the risk that benefits may not be paid at all, or at least on time and in full.

4.40 Changes in retirement benefits require reform in federal legislation. To some degree, such reforms are under way. The 20th Amendment to the federal Constitution (December 1998) adds some limitations to the retirement criteria for statutory employees. Under the new rules, a staff member must (1) have ten years of service in the public sector, (2) have five years in the position from which he or she is retiring, (3) meet minimum age criteria (60 years of age for men, 55 for women) and (4) meet a years-of-contribution criterion (35 for men, 30 for women). These changes will not have a major impact however. They do not abolish the Constitutional proviso that retirement benefits will be fixed at 100% of exit salaries.

4.41 The 19th amendment will also help in the long run, as it allows the state to hire new staff as CLTistas rather than as statutory employees. In addition to capping pension benefits, this will have a more immediate benefit to the state. In effect, it will convert the nature of the state’s obligation from one based on defined-benefits to one based on defined-contributions. (The state’s obligation to CLTistas is only to make a 21% payroll contribution to the INSS.) Like the 20th amendment, however, this provision will have little impact in the short term as it only applies to new staff.  

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65 The 20th amendment does contain a proviso which would allow states to reduce treasury-financed pensions to existing staff servants earning over a threshold amount, provided the state establishes a complementary fund to finance the difference. This will not help. Because the 100%-of-exit-salary guarantee remains in place, the state would continue to bear the open ended risk inherent in a defined
4.42 What options are available to the state? Pension reform should have two major objectives: (1) to cut pension benefits for higher-wage staff to a level that is financially sustainable, and (2) to reduce unnecessary risks to the state and to its retirees.

4.43 As described in greater detail in recent World Bank report, the ideal long term solution would be a two part system. The first part would provide a basic benefit to all workers subject to a cap. This would be similar to the INSS (and in fact, ideally would be part of the INSS so as to pool risks with a much larger population.) This would allow the state to reduce benefit levels, while still providing basic, defined-benefit, coverage to all staff. This would be complemented by a second system, providing a higher level of benefits, which would offered by the state as part of its compensation package. To reduce risks to the state, this would be a defined contribution, rather than a defined benefit, plan. To reduce the risk of political interference, pension liabilities under the complementary fund would be individualized and fully funded and would be administered by an agency independent of the state administration.

4.44 This plan cannot, of course, be fully implemented under present legislation. Under present law, a basic system with capped benefits cannot be fully imposed until all existing statutory employees are deceased. The state should therefore support federal efforts to reduce retirement benefits. Experience in other countries suggest a strategy. Government pension reforms normally distinguish between three populations: (1) existing retirees; (2) staff who are hired after the new rules go into effect, and (3) existing staff. Existing retirees are normally protected in their existing benefits. Newly hired staff are subject to the new contribution and benefit parameters. In dealing with the existing active staff, governments typically adopt a transition rule, in which staff who are close to retirement are fully protected, but those who are more recently hired are not. This is a critical part of pension reform. If benefits are not reduced for at least part of the existing active staff, it can be decades before any change in benefit and contribution parameters have any noticeable effect.

4.45 In Brazil, the existing legislation guarantees full benefits to all existing staff, regardless of how long they have worked. Some form of rule that establishes a cut off date for full benefits, or sliding reduction in benefits depending on length of service is needed. The Senate is also now considering legislation (PLC09) that would permit states to offer reduced pension benefits to newly-hired statutory employees. Since existing employees will not be affected, this will have little immediate impact. If this legislation were revised to permit states to reduce benefits to existing staff, in proportion to length of service, the impact would be significant. In legislative terms, the Government could accomplish this in two ways. One would be to have the federal government impose a uniform transitional regime for states. But even better would be to simply remove the stipulation in the Constitution that guarantees the salario integral and sets up the system of indexation. This would permit Bahia (and each other state) to define a transition rule that best fits its own circumstances.

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66 IBRD, Brazil—Critical Issues in Social Security, 1999
67 In addition, the report recommends that employees have the option of participating in private pension plans (IRAs etc.). These would not involve the participation of the state government.
4.46 In addition, the state should oppose federal legislation that would impose restrictions on the categories of staff that can be hired under the CLT. If the salario integral proves immutable, the option of hiring staff under the CLT would still permit the state to achieve fundamental reform in its pension plan, at least in the long run. As noted earlier, restrictions on the categories of staff that can be hired under the CLT are now under debate. The state should oppose them.

4.47 The state should also work to ensure the financial soundness of FUNPREV, by the ensuring its management independence and prohibit it from lending to state entities. Finally, the state should take full advantage of its newly acquired authority to hire staff under the CLT and to reduce pension benefits to newly hired estatutarios. (This will, however, have adverse short term fiscal consequences, as the state must immediately begin making INSS contributions on newly hired staff, rather than waiting until they retire.) While these measures will have an effect only in the long term, the time to prepare for the long term is now.

DEBT

4.48 Bahia’s debt stock is growing. Only part of this growth is due to new borrowing operations, however. Some of it arises from adjustments to principal on existing debt. Debt has also grown from the recognition of existing contingent liabilities—such as those of the state bank.. And debt may be growing from the capitalization of interest permitted under a recent series of debt rescheduling agreements. Overall, Bahia’s debt stock is growing faster than its revenues. Because the majority of debt consists of long-term relatively low interest loans, the carrying costs of the debt is fairly low.

4.49 The state’s current debt stock has four major components. The first consists of long standing debts to foreign creditors which were rescheduled under nationwide agreements in 1989 (under Law 7976) and the mid-1990s. Constituting four percent of the total stock, it now takes the form of 20 year obligations (extendable to 30 years) to the federal treasury, with interest rates based on original contract terms. It continues to be denominated in foreign currency, and is therefore vulnerable to exchange rate fluctuations. A devaluation in 1999 was responsible for much of the recent increase in the stock of this debt. The second block consists of longstanding debts to federal financial institutions. This debt was rescheduled in 1993, under Lay 8727. It now takes the form of 30 year debts to the treasury, denominated in reais, with interest rates based on original contract terms.

4.50 Both blocks of rescheduled debt are subject to a debt service ceiling. If the ratio of state debt service obligations to revenues rises above the threshold, the excess can be capitalized into the stock of debt, to be paid when debt service falls below the threshold amount or in the ten years after the expiration of the original twenty year repayment period.

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68 All Bahia’s debt is either indexed for inflation or denominated in international currencies that are subject to exchange rate fluctuations.
4.51 The third block is a more recent phenomenon. It is largely comprised of rescheduled states bonds and a large debt contracted to finance the sale of the state bank. The bonds were rescheduled in 1997, with the federal government transforming what had been 5 year bonds rolled over on a daily basis into a long term (30 year) debt to the federal treasury. Two years later, the federal government lent the state R$ 1.602 billion to finance the recapitalization of the state development bank—DESENBANCO—and the commercial bank—BANEB. Once solvent, DESEMBANCO was converted into a non-deposit taking development fund. BANEB was sold. The consolidated debt was made subject to the debt service ceiling noted above.

4.52 The fourth block consists of recent project borrowing. While older rescheduled debt is being gradually amortized, it has been replaced by new project loans from external donors and federal financial institutions. Part of this is comprised of housing and sanitation loans from the Caixa Economica. The state has also borrowed extensively from the IDB (for highway and water/sanitation projects) and to a smaller extent from the World Bank. BNB has helped finance the expansion of Salvador’s airport. BNDES and BNB have provided a large share of the counterpart financing for multilateral loans. Taken together, recent federal bank lending and external financing accounts for about 25% of the total debt stock. As a result, Bahia’s debt stock has grown substantially. Because revenues have also grown, the state’s debt:revenue ratio has grown only slightly. At the end of 1995, the debt:revenue ratio stood at 1.5:1. By the end of 2000, it had risen to 1.7:1.

4.53 The recurrent cost implications of these debts have, so far, been fairly moderate. Because virtually all the debt consists of either long term rescheduled debt or long-term project lending, immediate amortization costs are low. Most of the state’s debt service

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69 This was a complex transaction in which only 60% of the loan was used to fill the gap between each bank’s assets and liabilities. The remainder was used to purchase assets that had some market value. These were then sold (to the Caixa Economica), with the proceeds used to pay down part of the original loan. When the bank was sold (to Bradesco) for Rs$ 258 million), these proceeds were also used to amortize the debt. As a result, the state’s existing liability for this loan is considerably less than the original Rs$ 1.602 billion.
obligations over the next several years will consist of interest, rather than amortization.\textsuperscript{70} Because the vast majority of the state’s debt is owed to the federal government, it bears the relatively low interest rates associated with long term federal financing. The interest payments reported in the 2000 accounts are not trivial, however. The total, which excludes capitalized interest, principal adjustments, and any grace periods currently in effect, is equal to about nine percent of net current revenues.

\textbf{Prognosis}

4.54 For the time being, the state is still in a strong fiscal position. As a result of its restraints on personnel spending and its limited debt service obligations, the state has managed to keep revenues well ahead of fixed expenditures. As shown in the chart below, the state’s current account surplus has ranged from 6-8 percent between 1997 and 1999, and reached 21% in 2000.\textsuperscript{71} This large current surplus is desirable, as it permits the state to respond to external shocks—downturns in revenues, increases in expenditure requirements—without defaulting on its existing obligations. The state now uses its current surplus to finance capital works. These can be delayed or cancelled without violating long term contractual obligations.

4.55 The state overall balance—the difference between current revenues and total expenditures (excluding amortization)—has varied over the post Real period. As shown in the chart below, Bahia ran a large overall deficit during the 1997-99 period, due to the combination of stagnant revenues and increased capital spending.\textsuperscript{72} This trend reversed in 2000, due to growth in revenues and cuts in capital spending.

4.56 There are nevertheless two specific problems on the horizon. The first is the risk of slow growth in the economy. In response to the crisis in Argentina, the Central Bank has been forced to raise interest rates, to draw on IMF funds, and to intervene directly in the foreign exchange markets. So far its efforts have been relatively unsuccessful, with concerns about Argentina outweighing the confidence generated by the currency stabilization package.\textsuperscript{73} For Brazil as a whole, foreign

\textsuperscript{70} State spending on amortization in 1998 and 1999 was unusually high, due to the complex financing associated with the recapitalization of the state banks. These levels are not representative of long term trends.

\textsuperscript{71} As noted earlier in the text, the current surplus in 1999 is misleadingly large, as a significant share of retirement expenses were financed through drawdowns of Funprev’s capital.

\textsuperscript{72} Note that the overall deficit excludes the costs of recapitalizing the state bank and capitalizing Funprev.

\textsuperscript{73} Economist Intelligence Unit \textit{Country Report for Brazil}, July 2001
investment in the first seven months of 2001 was 33% lower than in the same period one year earlier. Falling investment, along with diminishing external demand and higher interest rates may result in slower GDP growth in the next few years. Historically, Bahia’s economic growth rate has paralleled that of the nation as a whole. If that relationship persists, slower economic growth will not only reduce the growth in federal transfers but also in receipts from the ICMS. Over the long term, the prospects are brighter. Brazil’s economic fundamentals remain strong. Inflation continues to be low and the federal government is now running large primary surpluses. Provided the state’s economic strategy continues to bear fruit, ICMS revenue should rebound.

4.57 In terms of expenditures, the principal threat arises from the state’s pension liabilities. While recent Constitutional amendments will provide some long term relief, their impact is likely to come too late to forestall a major hike in pension payments. The key to pension reform lies at the federal level—in the form of reductions in benefits for existing staff. Until such reform is forthcoming, Bahia would be well advised to maintain its conservative fiscal policies, even to the extent of reducing debt-financed capital spending.
5. ANNEX: INTERNATIONAL EXPERIENCE

The story of three low-to-middle income countries that have achieved sustained, high levels of growth in the last decades is instructive for Bahia. Each represents a different region and a somewhat a different route.

MALAYSIA

Malaysia has experienced almost forty years of uninterrupted growth (except 1980-85 and 1998). Over the course of this period, the country has been transformed from a lower income economy ($1200 per capita GDP in 1965) based on the export of primary products to a middle income economy ($4200 per capita) largely based on manufactured exports.

At independence (1957), Malaysia’s economy was dominated by the export of tin and rubber. Colonial policy discouraged local manufacturing. The new government aimed to industrialize Malaysia. To do so, it embarked upon a policy of import substitution. Import duties were raised and import quotas imposed in order to protect local manufacturing. But the new sectors quickly reached the limits of the small domestic market and the industrialization drive collapsed.

In 1968, the government shifted strategy. It abandoned import substitution and embarked on a deliberate effort to develop export-oriented manufacturing. The drive was aimed specifically at attracting foreign investment in the electronic components industry.

Malaysia offered several attractions. First, the labor force was easily trained (with relatively high literacy rates and widespread familiarity with English). It was also relatively cheap, and cooperative (due to the Government’s suppression of labor unions and restrictions on the right to strike.) The legal system worked well, and political
institutions were stable. The Government also offered generous fiscal incentives, including investment tax credits and deductions on corporate income taxes. Malaysia's timing was opportune. The export drive occurred at a time of growing interest by multinational corporations (MNCs) in finding lower cost locations for production. Between 1970 and 1980, the value of Malaysia's manufacturing exports increased by a factor of ten.

The electronics industry had few links to other sectors in the domestic economy, however. In an effort to encourage production for the domestic market, the government began a second round of import substitution in 1981-85. This focussed on primary inputs and heavy manufacturing, principally steel, cement, petrochemicals, pulp, and automobile assembly. A high degree of government intervention was required, including steep rates of effective protection, subsidized capital, and stringent controls on competition in the domestic market. In the midst of the global recession of the early 1980's, it failed.

The Government responded by returning to its former strategy. To reduce labor costs, it massively devalued the ringgit. It dismantled tariff barriers. But it also began to deliberately encourage the growth of more sophisticated manufacturing. Starting in 1988, industrial incentives were tied to technological deepening. Credit subsidies focused on higher value-added, more technology-intensive sectors. The Government also stepped up skill training and technical support.

Between 1987 and 1997, Malaysia's economy responded by growing at an average rate of eight percent, largely on the strength manufacturing. In 1998, at the outset of the East Asia crisis, the country's reliance on foreign capital seemed to prove a liability. FDI shrunk and the economy fell 7.4%. But Malaysia has since recovered smartly. Easy fiscal and monetary policies (aimed at encouraging private consumption and keeping interest rates low) combined with buoyant external demand (particularly in the U.S., which is the principal market for electronics), resulted in a 5.6% increase in GDP in 1999. Growth in 2000 is expected to reach 8.6%.

CHILE

Chile's recent development policies been more dramatic but ultimately less interventionist than Malaysia's. From high levels of protection and pervasive state intervention under the Allende regime, Chile's became an economy in which the engine of economic growth is the private sector. But in many respects, the experiences of the two countries are similar. Both have relied on exports as engines of growth. Both have relied on FDI as a source of savings for investment. And both have benefited from the sound fundamentals: a reasonably well-educated, yet docile labor force, a degree of political stability (since 1973), and well developed legal institutions (other than banks) for the conduct of economic activity.

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74 Following a period of civil unrest in the 1960s. The current prime minister has been in office for over thirty years.
When the military government took office in 1973, Chile's per capita GNP was $2300, only two thirds that of Brazil. The economy was in a tailspin. The former government's extensive intervention in the economy had ended in economic chaos and near-hyper inflation. The administration acted immediately to reduce state intervention in the economy. The number of state enterprises dropped from over 500 to 43. Prices were decontrolled. Banks were privatized and interest rates freed. Starting in 1974, Chile unilaterally adopted an open trade regime characterized by low uniform import tariffs, lack of exchange control, and minimal restrictions on capital movements.

The Government also brought the labor unions under its control, imposing a system of inflation indexation to set wages. In 1979, it further weakened unions by mandating collective bargaining at the firm (rather than industry) level, outlawing the closed shop, reducing barriers for dismissal and restricting strikes. In 1982, the automatic link between wages and inflation was eliminated, and adjustments fell behind inflation.

The immediate result was a continued economic decline. In 1975, the economy contracted by 13%. In part this was due to exogenous factors, particularly trading losses due to rising oil prices and falling copper prices. But it also reflected a drop in domestic demand stemming from the government's restrictive fiscal and monetary policies and rising unemployment due to privatizations. Floating the exchange rate failed to spark exports. Instead it merely increased the price of imports, further reducing real wages.

The first phase of Chile's economic recovery began in 1976. Financed by foreign investment, the Government's liberal trade policies fostered growth in both traditional exports (mining and fishing) and new natural-resource based sectors: cellulose, fruit, salmon, wines, as well as tourism. Between 1976 and 1981, Chile's GDP grew at an annual rate of seven percent. Foreign investment, however, had taken the form of loans, rather than equity, and was contracted at variable rates. This left Chile vulnerable to changes in investor perceptions of third world debt, and sudden increases in international interest rates. It was, moreover, intermediated by a largely unregulated domestic banking sector, which became increasingly overextended.

These risks became apparent in 1982-83. The international debt crisis brought the inflow of foreign capital to a halt. Interest rates on existing debt soared. A widespread banking crisis followed, as Chilean firms, confronted with high interest rates and declining demand went into default. GDP fell 16% over the two year period. The government initially responded with a contractionary fiscal policy. In 1984, it reversed direction, increasing government spending and cutting taxes. Failed banks were temporarily nationalized and recapitalized (at a cost equal to 35% of Chile's 1986 GDP). The government also renewed its efforts to promote trade. The exchange rate was allowed to depreciate. Import tariffs were further reduced. The combination of low tariffs and a low exchange rate set off a new wave of exports, particularly in fresh fruits and manufactured products. (Exports grew at an annual average of eleven percent between 1985 and 1989. GDP expanded at average annual rate of 6.6%.)

The economic policies of the military government have largely been continued under the democratic regime which took office in 1990. The incoming regime pledged continuity, citing "stability and credibility in economic institutions" as key factors in
maintaining Chile’s favorable investment climate. Some efforts have nevertheless been made to increase social spending and to redress the balance of power between employees and employees. Fiscal policy has been aimed at increasing non-financial public sector savings, through tax increases. Monetary policy has been similarly conservative. Fearing rapid economic growth would spark inflation, the central bank has kept interest rates high. Nevertheless, aided by high copper prices and lower international interest rates, the Chilean economy had completed 14 years of continuous high growth (7.6% average) since the 1982-83 recession. Although the growth rate slowed to 3.4% in 1998 and became negative (-1%), it appears to be on the rebound in 1999. GDP grew at an annualized rate of 5% in the first quarter of 2000.

IRELAND

Ireland was considerably wealthier than Malaysia or Chile when its economic boom began (per capita GNP in 1960: $5100) but was coming off a half-century of economic stagnation. The economy grew at an average rate of only 2% in the 1950s, far below the Western European average. In 1958, the Government began to replace its historically isolationist and protectionist policies with a policy of openness to trade and investment. In 1973, it joined the European Union, and in 1979, the European monetary system, ending a fixed link to the British pound.

Joining the EU had a dramatic impact on Ireland’s economy. By reducing tariffs within the EU, it gave Irish products easier access to EU markets. It also increased Ireland’s attractiveness as a base for foreign manufacturing investment, both for non-EU countries looking for a base to penetrate the EU market, and for EU firms looking for a cheap manufacturing base within the EU.

Labor was another of Ireland’s attractions. Relative to other EU countries, the labor force was young, relatively well educated, and cheap. Literacy among the young was virtually universal. Wage levels were low, by northern European standards. (Although pay levels and conditions were generally agreed through collective bargaining between employees and employers, less than 20% of private sector employees were trade union members, and pay levels were largely market determined.) The labor force was also English-speaking—an attraction not only to US firms, but to other multinationals, as English is the common language of MNC regardless of national origin.

The Government topped these advantages with a program of industrial incentives. Prior to 1982 (and increasing EU restrictions) Ireland offered a full tax holiday on profits arising from new export sales by foreign manufacturing companies. The Government’s efforts were particularly focused on electronics and pharmaceuticals, both “weightless” sectors where rapid growth was expected. In an effort to develop agglomeration economies, the Government also promoted “clusters” of related industries. Thus

75 The minimum wage was increased, subject to an agreement that future wage increases would be linked to productivity and inflation. Labor negotiations at the industry level were re-introduced and restrictions on strikes were lifted.

76 i.e. sectors where transport represents a small proportion of total production costs.
computer assembly firms (Apple, Compaq, Dell, Gateway, and IBM) were followed by microprocessor manufacturers (Intel and NEC) and software companies (Microsoft, Lotus, Oracle.)

The Irish miracle was slow to start and has been discontinuous. Average annual growth in the first five years after accession to the EU was only 5.3%, in real per capita terms, and fell to 2.3% during a period of growing government deficits in the early 1980's. A major change in fiscal policy—toward greater austerity—was required to restore investor confidence and restart the economy. Since then, EU controls over exchange rates, and trade and monetary policies have limited the Government's ability to use this instruments to promote industry. Nevertheless, the Irish economy has grown at an average annual rate of seven percent since 1986. In the last five years, the real per capita growth rate has averaged ten percent. In 1999, Ireland surpassed the U.S. as the world's largest exporter of software.
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