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Brazil

Attacking Brazil's Poverty

A Poverty Report with a Focus on Urban Poverty Reduction Policies
(In Two Volumes) Volume II: Full Report

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ABBREVIATIONS

BB	Bank of Brazil (<i>Banco do Brasil</i>)
BNB	Bank of the Northeast (<i>Banco do Nordeste</i>)
BNDES	National Development Bank (<i>Banco Nacional de Desenvolvimento Econômico e Social</i>)
BPC	Disability and Elderly Pension (<i>Benefício de Prestação Continuada</i>)
CEF	Federal Loan and Savings Bank (<i>Caixa Econômica Federal</i>)
CODEFAT	Council of the Worker Support Fund (<i>Conselho Deliberativo do Fundo de Amparo ao Trabalhador</i>)
FASE	Federation of Social Assistance and Education Entities (<i>Federação de Órgãos para Assistência Social e Educacional</i>)
FAT	Worker Support Fund (<i>Fundo de Amparo ao Trabalhador</i>)
FGTS	Severance Fund (<i>Fundo de Garantia por Tempo de Serviço</i>)
GDP	Gross Domestic Product
IBGE	Brazilian Institute of Statistics and Geography (<i>Instituto Brasileiro de Geografia e Estatística</i>)
ICMS	Value Added Tax (<i>Imposto Sobre Operações Relativas Circulação de Mercadorias</i>)
IDB	Inter-American Development Bank
IPEA	Institute for Applied Economic Research (<i>Instituto de Pesquisa Econômica Aplicada</i>)
LAC	Latin America and the Caribbean Region
LBA	Former Government Direct Assistance Agency (<i>Legião Brasileira de Assistência</i>)
LOAS	Framework Law for Social Assistance (<i>Lei Orgânica da Assistência Social</i>)
LSMS	Living Standard Measurement Survey
MR	Metropolitan Region
NGO	Non-Governmental Organization
O&M	Operation Maintenance
OECD	Organization for Economic Cooperation and Development
OED	Operations Evaluation Department
OLS	Ordinary Least Square
PAB	Health Funding Floor (<i>Piso de Assistência Básica</i>)
PACS	Community Health Agents Program (<i>Programa de Agentes Comunitários de Saúde</i>)
PAS	Health Agents Program (<i>Programa de Agentes de Saúde</i>)
PASS	Basic Sanitation Program (<i>Programa de Ação Social em Saneamento</i>)
PAT	Workers Food Program (<i>Programa de Alimentação do Trabalhador</i>)
PIS/PASEP	Labor Funds for Private and Government Sector Workers (<i>Programas de Integração Social e de Formação do Patrimônio do Servidor Público</i>)
PLANFOR	Labor Ministry Training Programs (<i>Programa Nacional de Qualificação do Trabalhador</i>)
PME	Monthly Employment Survey (<i>Pesquisa Mensal de Emprego</i>)
PMSS	Water Sector Modernization Project (<i>Programa de Modernização do Setor de Saneamento</i>)
PNAD	National Household Survey (<i>Pesquisa Nacional por Amostra de Domicílios</i>)
POF	Household Expenditure Survey (<i>Pesquisa de Orçamentos Familiares</i>)
POLIS	Social Policy NGO/Think tank (<i>Instituto de Estudos Formação e Assessoria em Políticas Sociais</i>)
PPV	Living Standard Measurement Survey (<i>Pesquisa sobre Padrões da Vida</i>)

PQA	Water Quality Control (<i>Programa de Qualidade às Águas</i>)
PREM	Poverty Reduction and Economic Management Network
PREZEIS	Recife Urban Upgrading Program (<i>Programa de Zonas Especiais de Interesse Social</i>)
PRODEA	Food Distribution Program (<i>Programa de Distribuição de Alimentos</i>)
PROEMPREGO	Direct Credit Program for Employment Generation (<i>Programa de Expansão do Emprego e Melhoria da Qualidade de Vida do Trabalhador</i>)
PROGER	Employment Promotion Program (<i>Projeto para Geração de Emprego e Renda</i>)
PRONAF	Family Agriculture Credit Program (<i>Programa Nacional de Fortalecimento da Agricultura Familiar</i>)
PROSANEAR	Water and Sanitation Project for Low-Income Populations (<i>Projeto de Água e Saneamento para a População de Baixa Renda</i>)
PSF	Family Health Program (<i>Programa de Saúde da Família</i>)
RMV	Lifetime Minimum Pension (<i>Renda Mensal Vitalícia</i>)
SAEB	National System for Basic Education Evaluation (<i>Sistema Nacional de Avaliação de Educação Básica</i>)
SENAI	Industrial Private Sector Job Training Program (<i>Serviço Nacional de Aprendizagem Industrial</i>)
SENAC	Commercial Private Sector Job Training Program (<i>Serviço Nacional de Aprendizagem Comercial</i>)
SFI	Real Estate Financial System (<i>Sistema Financeiro Imobiliário</i>)
SIPAS	Information System of the Health Agents Program (<i>Sistema de Informação do Programa de Agentes de Saúde</i>)
SUS	Unified Health System (<i>Sistema Único de Saúde</i>)
SWCs	State Water Companies
TJLP	BNDES Long-Term Lending Rate (<i>Taxa de Juros de Longo Prazo</i>)
VT	Employer-Provided Transportation Pass (<i>Vale Transporte</i>)
WHO	World Health Organization

Attacking Brazil's Poverty

A Poverty Report with a Focus on Urban Poverty Reduction Policies

Full Report

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FOREWORD

This report was produced under the supervision of Gobind T. Nankani, Director, Suman Bery, Lead Economist, and Norman Hicks, Sector Manager Poverty, by a World Bank team led by Joachim von Amsberg, and comprised of Francisco Ferreira, Peter Lanjouw, Kimberly Nead, Marcelo Neri, Judy Baker, Ricardo Paes de Barros, and Zhi Liu. Additional background papers were prepared by: Sonia Rocha, Martin Ravallion, Maria da Piedade Morais, Claudio Hamilton, Diana Meirelles da Motta, Silvio Caccia Bava, Paulo Sérgio Pinheiro, Rubem César Fernandez, Ana Clara Torres Ribeiro, Grazia di Grazia, and Rosane Mendonça. Julia Conter, Leo Feler, and Carolina Sanchez assisted with the production of the report. The peer reviewers for this task were Jeffrey Hammer, Jesko Hentschel and Josef Leitman.

This report was produced in close collaboration with various institutions and individuals in Brazil. In particular, the extensive collaboration with the *Instituto de Pesquisa Econômica Aplicada* (IPEA) is gratefully acknowledged. The working papers prepared for this report were presented and discussed at various seminars. Many useful comments were received and are appreciated. The team wishes to thank all individuals in the Government, the World Bank, and elsewhere, who have contributed with their time, thoughts, and comments to this report. While the report has been discussed with many institutions and individuals of the Brazilian Government, the views expressed in the report are exclusively those of the World Bank and not necessarily those of the Brazilian Government.

Most of this report is based on work undertaken in 1998, based on data from the PPV 1996/7 and the PNAD 1996. It reflects information available at that time. Only selective updates have been made in a few cases to reflect more recent data or policy developments.

The Summary Report (Volume I) and the Full Report (Volume II) are based on several background papers prepared for this task, which are listed at the end of the report. In the text, no specific references are made to these documents. The Summary Report contains the most important findings and policy recommendations without providing the analytical support that is contained in the Full Report and the background papers. The background papers have been prepared under the responsibility of their respective authors and are not official World Bank documents. They are available from the following website: <http://www.worldbank.org/br>.

1. Introduction

Overview

1. The first central message of this report is that Brazil has over the last years achieved great progress in its social indicators, especially in health and education and achieved considerable progress in the reduction of income poverty. Overall, recent and ongoing policy reforms are on the right track, and the perspectives for Brazil's poor for a better life in the future have considerably improved.

2. The second central message is that poverty remains unacceptable high for a country with Brazil's average income levels. The worst remaining income poverty is mostly concentrated in the Northeast region, and in the smaller urban and rural areas. At the same time, the poor in large urban and metropolitan areas suffer from additional deprivation related to crowding, poor health, violence and crime and should not be neglected.

3. The third central message is that, with decisive action, Brazil can achieve ambitious targets for further improvements in social indicators, including the objective of reducing the rate of extreme income poverty by 50% by the year 2015. This report proposes a strategy for reaching this goal that includes renewed broad-based and inclusive growth as well as further reforms of social spending and social policies. This strategy requires continued actions and commitment at all levels of Government.

4. Poverty is unacceptable deprivation in human well-being. This includes insufficient income and consumption, unsatisfied basic needs such as basic education, health, nutrition and housing, insecurity and risk, as well as voicelessness and powerlessness. Most of this report employs a much narrower definition of poverty as per-capita household income below a specific poverty line. As such, this report is about 35 million Brazilians who live below the particular line

of extreme poverty defined for this report and about public policies that can help these people escape from poverty. These Brazilians constitute 22.6% of the population of the country but receive less than 3% of the aggregate income.

5. Poverty in Brazil is a complex and multidimensional phenomenon. A report of this nature necessarily excludes many important aspects, and simplifies complex aspects of the real world. In particular, a narrow definition of poverty as insufficient income or consumption was chosen in order to permit extensive quantitative analysis of related issues. While the broader dimensions of poverty are recognized and the relationship between income levels and other characteristics of the household or individual are analyzed, a more comprehensive approach to analyzing other forms of deprivation or social exclusion is not attempted. Also, issues pertaining not directly to poverty but more broadly to the inequality of income, assets, and opportunity are not treated in this report.

6. Recognizing the rich existing literature on poverty in Brazil, this report attempts a few specific contributions. First, it presents a new 1996 poverty profile with a breakdown by city size, incorporation of the imputed value of owned housing, and regional price deflators. Second, it provides detailed analysis of the incidence of selected public social spending based on the 1996/7 *Pesquisa sobre Padrões de Vida* (PPV).¹ Third, it selectively synthesizes past work on poverty in Brazil in order to present an overview of cross-sectoral comparisons of the effectiveness of policy interventions. Fourth, it provides suggestions and selective inputs for the development of a national poverty reduction strategy. The report updates several parts of the previous poverty assessment (World Bank 1995a) and builds on earlier

¹ This survey was implemented by IBGE with assistance from the World Bank as a Living Standard Measurement Survey (LSMS).

Table 1: Options and Principles for Poverty Reduction Policies

	Functioning of Markets Regulatory Reform	Cost Effectiveness and Targeting of Social Spending Social Spending Reform			
	How can markets and regulations be made to work for the poor?	<u>Targeting:</u> Who should receive the benefits of transfers implicit in social spending?	<u>Allocation:</u> Should resources be transferred through current consumption or investment?	<u>Demand Focus:</u> Should resources be transferred to the poor in cash, vouchers, or in-kind?	<u>Internal Efficiency:</u> How can the impact of social programs be improved?
<u>Opportunity:</u> Growth	Growth and regulatory reforms to improve opportunities and access for the poor to formal markets should be vigorously pursued.	The transfers (subsidies) of social programs should be targeted to those below a chosen poverty line, which should be uniform for all programs (local governments in rich areas could adopt a higher poverty line). Per-capita transfers should always be higher for those below the poverty line.	Reallocate resources between programs according to transfer effectiveness. Social investment programs should only be undertaken if their benefits (including the saved administration costs of transfer programs) exceed their costs.	Provide social services according to demand and encourage active participation in design. Transfers of cash are preferable over vouchers, which are preferable over in-kind transfers unless there are justifications in terms of better targeting, public goods, or well-grounded paternalistic motives.	Improve internal efficiency of program implementation (least cost for physical output and impact).
<u>Capacity:</u> Education Health Urban Services Physical Assets					
<u>Security:</u> Social Insurance Social Assistance					
<u>Empowerment:</u> Participation					

work toward an urban poverty strategy for Brazil (World Bank 1995b).

7. Brazil is currently witnessing a resurgence of public and political interest in issues related to social policies and poverty reduction. This report is meant to be a technical input to the policy debate. Specifically, this report attempts to contribute to the discussion on how Brazil can achieve specific poverty reduction goals such as the reduction of the rate of extreme poverty by 50% by the year 2015. The Government has committed itself to this target in the context of the International Development Goals.

8. The primary audience for this report includes policy makers in Brazil, at all three levels of government, in planning functions and in all sectors with responsibility for poverty reduction. The secondary audience consists of a broader public, international agencies, and others, interested in social development in Brazil. The report is organized by sector. In the context of each sector, policies that affect all three levels of government are discussed.

9. This report consists of three parts. The first part (Section 2) describes the profile of

Brazil's poor. The second part (Section 3) assesses individual policy areas of relevance for poverty reduction. Specifically, for each policy area, characteristics of government policies, coverage, targeting, and efficiency of current programs as well as proposals for improving the efficiency and targeting of policies are discussed. (Readers not interested in specific sectors may want to skip to the respective subsections). The third part (Section 4) analyzes overall poverty reduction strategies and scenarios. This part includes an overview of social spending, a comparison of the effectiveness of interventions in different areas, and elements of a proposed overall poverty reduction strategy, including: (a) promoting growth and stability to increase employment income; (b) strengthening the assets of the poor in a way that generates opportunities and ladders to rise out of poverty; (c) providing a social safety net that insures against social risks; and (d) ensuring participation in implementation and decision making.

Framework

10. The framework for this report is the assessment of the policy options for poverty

reduction available to governments in Brazil on the basis of simple economic principles. The menu of poverty reduction policies can be divided into four areas. In practice, governments adopt a combination of policies from all of these areas (see the rows of Table 1):

- (a) **Opportunity:** Policies directed at growth, including the establishment of a stable macroeconomic framework, effective rules for the functioning of a market economy, and fiscal balance, in order to create employment and income opportunities for the poor.
- (b) **Capacity:** Strengthening the assets of the poor and enabling them to make use of economic opportunities through education, health, physical and urban services, and physical capital.
- (c) **Security:** Helping the poor manage risks of adverse shocks either at the economy-wide (recessions, natural catastrophe) or individual (illness, job loss) level.
- (d) **Empowerment:** Overcoming exclusion of the poor from participation in social institutions, decision making, and the formal economy.

11. Governments can improve the functioning of markets through regulatory reforms and transfer resources to the poor through spending (levying taxes and spending on different social programs or requiring others to spend, for example, requiring infrastructure providers to offer cross-subsidized tariffs to the poor). Four issues arise with respect to social spending: (a) targeting to the poor; (b) allocation of resources between programs; (c) demand orientation and beneficiary choice; and (d) internal efficiency. Basic economic principles are established here along these five dimensions (regulatory reforms, and four aspects of social spending reform—see the columns of Table 1) and used for the systematic assessment of different (complementary) policy approaches to poverty reduction throughout this report. It is important to note that these principles are

derived from the single policy objective of reducing or eliminating poverty and do not take other policy objectives into account.

12. Regulatory policies aim at the reduction of inefficiency and the elimination of market failures that hurt the poor. They involve reforms of labor, capital, and housing markets, development of markets for low-cost products that meet the demand of the poor, improvements in the efficiency of public service provision, as well as public sector reform to improve access of the poor to public services, including the legal system. Since these policies often do not require significant fiscal resources, there is no direct trade-off with other poverty reduction policies. Policies to promote growth and market efficiency should therefore be vigorously pursued.

13. Targeting. If perfect targeting were possible and there were no negative incentive effects, the most cost-effective way to eliminate income poverty would be to transfer to every household the difference between its income and the poverty line. However, since such a policy would imply incentives against own efforts of households under and closely above the poverty line, transfers would be designed such that they leave incentives to work intact; they would not stop but gradually phase out above the poverty line. This means that some degree of leakage of benefits to households close above the poverty line would be necessary. However, the absolute amount of the transfer would always be higher for a person with lower income. This means there is no justification for transferring a larger amount to a household above the poverty line than to a household below the poverty line. Also, there is no justification for using different poverty lines for the targeting of different national programs, regardless of the type of transfer involved (cash or in-kind, investment or current income).

14. Allocation. Social programs can transfer resources for current consumption or invest in the assets of the poor (housing, education, directed credit). In the latter

case, the actual consumption benefits to the poor are typically delayed and depend on the returns to those social investments, which in turn depend on the characteristics and behavior of the target group.

15. Investment programs should only be undertaken if their benefits are higher than their costs. This principle remains valid even if the benefits of an investment program are targeted at the poor. Since the alternative for transferring resources to the poor is usually costly, the benefits of targeted investment programs can include the saved administration costs of transfer programs. If an investment program cannot be economically justified even taking non-income benefits and the saved administration costs of transfer programs into account, it should not be undertaken, and transfers should instead be made directly to the poor. In other words, bad investments cannot be justified even with social objectives. Of course, many social investment programs are economically viable. They combine positive economic returns with an implicit transfer and thus reduce the fiscal cost of transferring resources to the poor. They are attractive especially if they lead to the sustainable escape from poverty.

16. The amount and nature of spending for growth policies (such as public infrastructure) should be established on the basis of good public finance principles. The spending allocation between growth policies and targeted social policies is a social and not a technical choice. Technical poverty analysis can, however, provide information on the amount of targeted spending required together with certain levels of growth to reach specific poverty reduction objectives. This report attempts such an analysis.

17. Demand orientation. Social programs can transfer resources to the poor in-kind or in cash for either current transfers (food baskets vis-à-vis cash transfers) or investments (housing, education, vis-à-vis access to credit). An intermediate approach consists of vouchers (food stamps, school vouchers), which permit choice of service

provider but limit choice between different types of services. In principle, cash transfers or access to credit is preferred as it permits the poor themselves to make choices according to their own preferences. There are cases, however, where in-kind transfers or investments are well justified. In-kind transfers may be easier to target (in the case of inferior goods such as unappealingly packaged food items). In the case of public infrastructure with significant externalities (such as water and sanitation connections), there may also be a good case for in-kind transfers. Finally, there may be paternalistic motives for universally providing the most basic services including basic education, water, and shelter. However, for services that extend beyond the most basic needs, in-kind programs should be justified rigorously and explicitly.

18. Internal Efficiency. Programs should be internally efficient in the sense that they achieve maximum physical output or social impact for a given amount of resources.

19. On the basis of these policy principles, this report attempts to assess the design of and the allocation of policies toward poverty reduction in Brazil and proposes policy improvements such that a poverty reduction objective can be achieved most effectively and at least cost. The policy principles are summarized in Table 1. A similarly structured matrix summarizes the recommendations of this report at its end (see Table 31).

The Report's Urban Focus

20. The present report contains a national poverty profile, and a discussion of overall poverty reduction strategies and scenarios; however, the report excludes discussion and analysis of policies specifically directed at the reduction of rural poverty, such as land reform and agriculture. Specific rural poverty issues are discussed in a separate World Bank report currently under preparation. The scope of the current report excludes rural poverty simply to keep the scope of the report manageable.

Table 2: Population Growth Rate, Brazil, 1950-96

Period	Annual Growth Rate			
	All Area	Metropolitan Region	Rural Area	National Total
1950-60	6.2	n.a.	1.8	3.0
1960-70	5.4	n.a.	1.5	2.9
1970-80	4.9	3.8	0.4	2.5
1980-91	2.9	1.9	-0.6	1.9
1991-96	2.5	n.a.	-0.8	1.7

Source: Stren (1995, p.49, 52), and IBGE Census of Population

21. No judgement whatsoever on the relative importance of urban versus rural poverty policies is implied by the exclusion of rural policy issues from this report. Moreover, it is not suggested that urban areas are homogenous as a group and distinct from rural areas. In fact, analysis in this report shows that small urban areas are quite different from large cities and share similarities with rural areas. Despite the focus on urban policies, the analysis in this report is presented for policy makers at the national, state, and local level, all of which typically are responsible for both urban and rural population.

22. The forthcoming rural poverty report will include in-depth analysis of specific problems related to poverty measurement in rural areas. It will thus produce more reliable estimates of the split between rural and urban poverty than those provided here, which are based on the best currently available methodologies and national data sources. Also, policy issues surrounding topics such as land reform, small-farm agriculture, rural non-farm employment, rural labor markets, and rural pensions will be

discussed in the rural poverty report.

23. Migration from rural to urban areas constitutes an important linkage between rural and urban poverty. While migration issues are not analyzed in depth in this report, it is important to consider the impact of migration and the possible impact of policies on migration. Migration from rural to urban areas can delay the impact of urban poverty reduction policies on urban poverty reduction. Since the concern of policymakers should be with the entire population, rural to urban migration should not be of particular concern as long as per capita subsidies implicit in the combined package of social policies to the urban population are not significantly larger than for the rural population. Managing the relative size of implicit subsidies will avoid incentives for inefficiently accelerated migration.

24. It is useful to place the poverty profile and the analysis of urban policy issues in the context of the ongoing migration and urbanization processes. Brazil's urbanization process is continuing, albeit at a decreasing rate. As Table 2 indicates, the annual urban population growth rate has declined from

Table 3: Annual Population Growth Rates for Metropolitan Regions, 1970-96

	Metropolitan Region		Core		Periphery	
	1970-80	1980-91	1970-80	1980-91	1970-80	1980-91
North & Northeast						
Belem	4.3	2.7	4.0	2.7	11.3	2.7
Fortaleza	4.3	3.5	4.3	2.7	4.3	6.4
Recife	2.7	1.8	1.2	0.7	4.6	2.9
Salvador	4.4	3.1	4.1	2.9	6.5	4.2
South & Southeast						
Belo Horizonte	4.6	2.6	3.7	1.3	7.0	5.0
Rio de Janeiro	2.4	0.8	1.8	0.4	3.4	1.3
São Paulo	4.5	1.7	3.7	1.0	6.3	3.1
Curitiba	5.8	2.9	5.3	2.1	7.0	4.7
Porto Alegre	3.8	2.6	2.4	1.1	5.4	3.8
Metropolitan Total	3.8	1.9	3.4	1.2	6.3	3.0

Source: Stren (1995, p. 52).

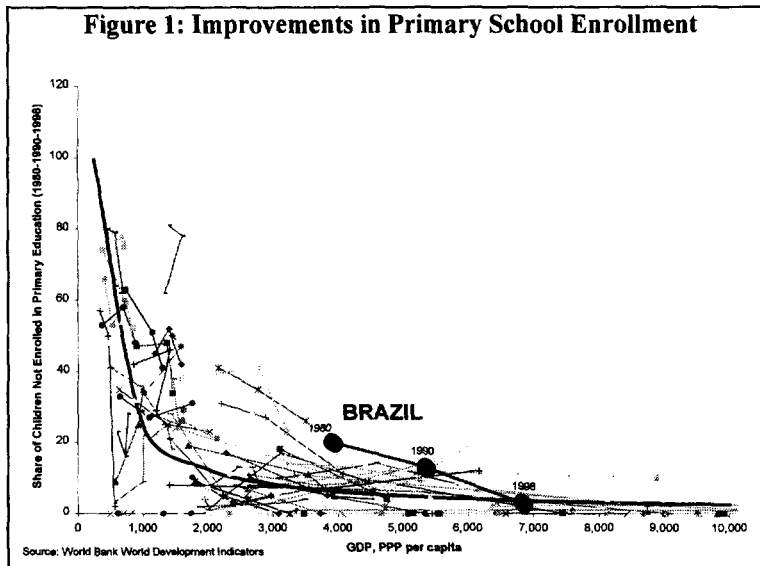
6.2% in the 1950s to about 2.5% in recent years for all urban areas. Annual growth for metropolitan areas is slower than for the entire urban population. Thus, population growth in non-metropolitan urban areas is greater than in metropolitan regions. Metropolitan areas typically consist of a core

(the capital municipality) and periphery (other municipalities of the metropolitan area). As Table 3 indicates, the metropolitan population living in the periphery is rapidly growing while the metropolitan core areas no longer receive net migration and are growing less than the national average.

2. The Poverty Trends and Profiles

Social Indicator and Poverty Trends

25. Over time, Brazil has made great advances in improving its social indicators. Twenty years ago, many of Brazil's health and education indicators were far worse than one would expect for the country's average income level. These indicators have not only improved continuously and substantially, they have also approached or even surpassed levels that would be expected at the coun-



try's average income level. Figure 2 and Figure 1 show this progress very clearly, using the examples of the infant mortality rate and the rate of non-enrollment in primary schools, respectively.

26. Fluctuating with macroeconomic events, income poverty has also been declining overall. Data on poverty trends before 1994 has to be treated with extreme caution given the methodological challenges associated with the measurement of poverty in the high-inflation environment. In fact, different studies using the same original data sources have produced significantly differing medium-term poverty trends for Brazil. Recognizing the limitations, such trend

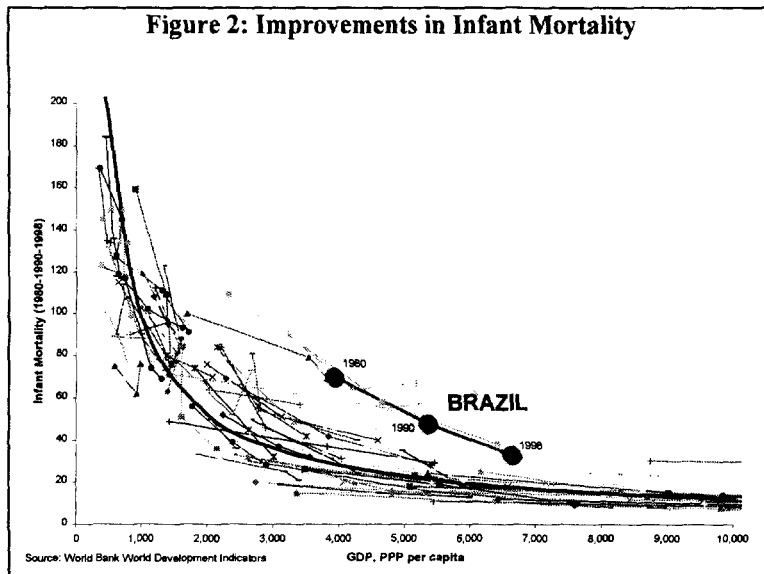
analysis can nevertheless reveal interesting links between poverty rates, macroeconomic events, and Government transfer programs.

27. Poverty trends, using two different surveys are presented here. Figure 3 shows the poverty trend from the annual household survey (PNAD), which covers the entire country (excluding the rural north) and all income sources and provides a good basis for country-wide poverty analysis. Since the focus here is on intertemporal comparability,

the poverty lines used in this analysis are different from the ones used for the poverty profiles in the present report. The poverty trend shown in Figure 4 is derived from a monthly employment survey (PME), which covers only six metropolitan areas and captures only labor income. Due to the limitations of the PME, these measurements are not comparable with the national poverty rate discussed before but are helpful to analyze short-term and more recent fluctuations in poverty.

28. Both surveys show a first peak in poverty in the adjustment period between 1982-85. Poverty declined with the growth policies of the *Cruzado* Plan in 1985-86, which included price freezes and lax fiscal and monetary policies. These policies were not sustainable and resulted in a period of hyperinflation and intermittent stabilization attempts, which led to a new peak in poverty in the early 1990s.

29. Significant gains in poverty reduction and positive distributional effects were obtained during the 1994-96 stabilization period. These gains had at least three sources. First, stabilization brought a 35% real exchange rate appreciation from July 1994 to February 1995 leading to an increase in the



relative price of tradables. This change not only reduced poverty but also inequality. Second, the removal of the inflation tax had a significant effect on poverty. IPEA estimates a 9% increase in the purchasing power of the poor as the result of the end of inflation. Amadeo and Neri estimate that about half of the drop in poverty can be explained by the removal of inflation, combining the effects of salary erosion with devaluation of cash balances held by the poor (Amadeo and Neri 1998). Third, stabilization coincided with a significant increase in the minimum wage. Especially the long-term benefits of poverty reduction through higher minimum wages are doubtful, but there is strong evidence for a positive short-term effect in Brazil; in addition, important non-wage benefits, such as pensions, are tied to the minimum salary.

30. The economic crisis of 1997-99 has affected the poor mainly through reduced labor demand and the resulting reduction in employment and/or real wages. While poverty rates, measured by the PNAD, declined until 1998, they slightly rose in 1999 as a result of the crisis, mostly in urban areas. According to PME poverty measurements, the headcount poverty rate in metropolitan areas dropped from a peak of 35.3% in July 1994 to a low of 24.6% in October 1997. The rate increased continuously from November 1997 until March 1999, when it

reached 30.0%. Subsequently, poverty rates declined again (28.6% in September 1999), indicating a reversal in the negative crisis impact. It needs to be reiterated that data from the PME most likely exaggerates the negative impact of the crisis since it is limited to six metropolitan areas (most likely the hardest hit areas) and excludes income from transfer programs which would have compensated for some of the loss of labor income.

31. Abstracting from poverty fluctuations surrounding the unsustainable *Cruzado* Plan, PNAD analysis shows a more favorable long-term poverty trend. The difference between both surveys can be explained by two related factors. First, the areas surveyed and incomes covered by the PME are those most sensitive to macroeconomic events (labor income in metropolitan areas). Second, Brazil has introduced social transfer programs (such as rural pensions) that have made an important contribution to poverty reduction but are not captured in poverty measurements derived from the PME. Overall, the PNAD is likely to present a more accurate picture of the evolution of poverty rates in Brazil, while the PME permits the short term analysis of labor market trends in the metropolitan areas.

Poverty Measurement

32. In this report, a poor person is defined as an individual living in a household with a per capita income less than or equal to the equivalent of R\$65 per month at São Paulo Metropolitan Area prices. Income is adjusted for price differences in different areas of the country and for the imputed rent of housing. Income is measured by the national household survey undertaken in 1996 (PNAD 1996). Comparative analysis is also based on the income and consumption data from the PNAD 1993, PNAD 1998, and the

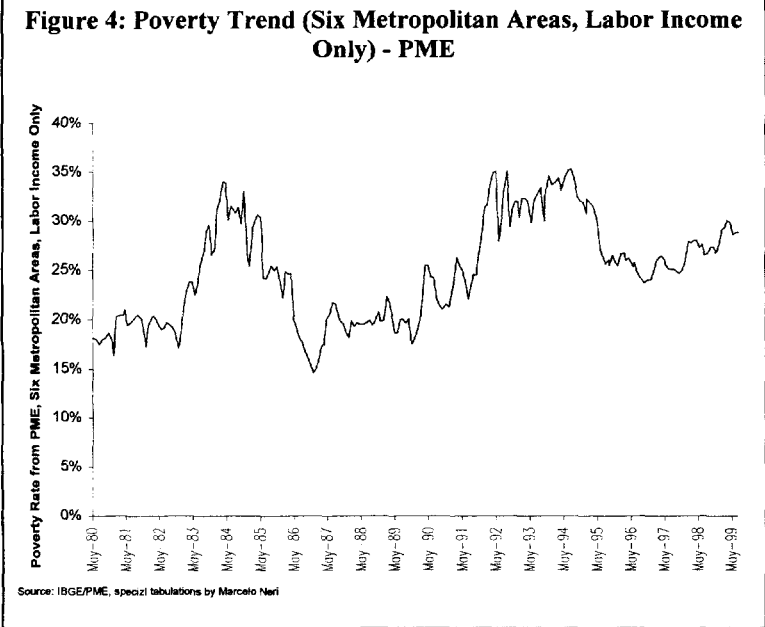
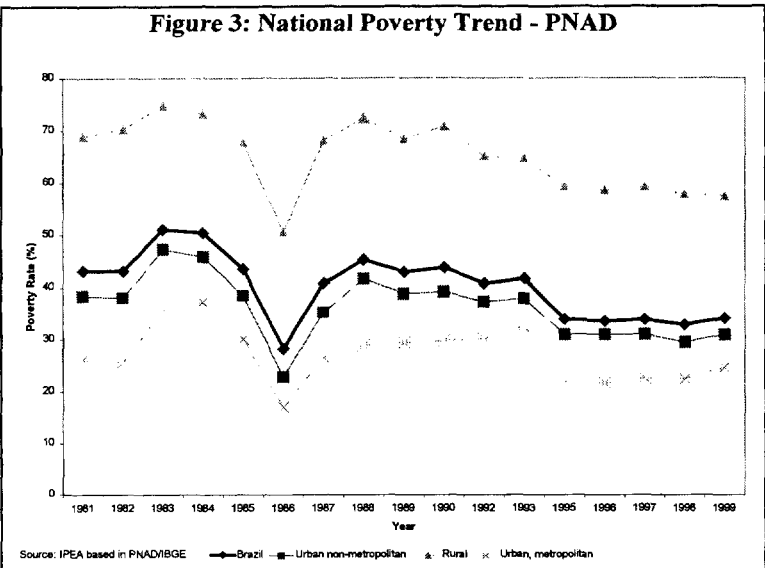
1997 LSMS household survey (PPV). The extreme poverty line of R\$65 is determined by the cost of a minimum food basket (extreme poverty line). This report focuses on, and, unless mentioned otherwise, uses the extreme poverty line of R\$65 in order to

R\$132. Profiles are available for this poverty line as well.

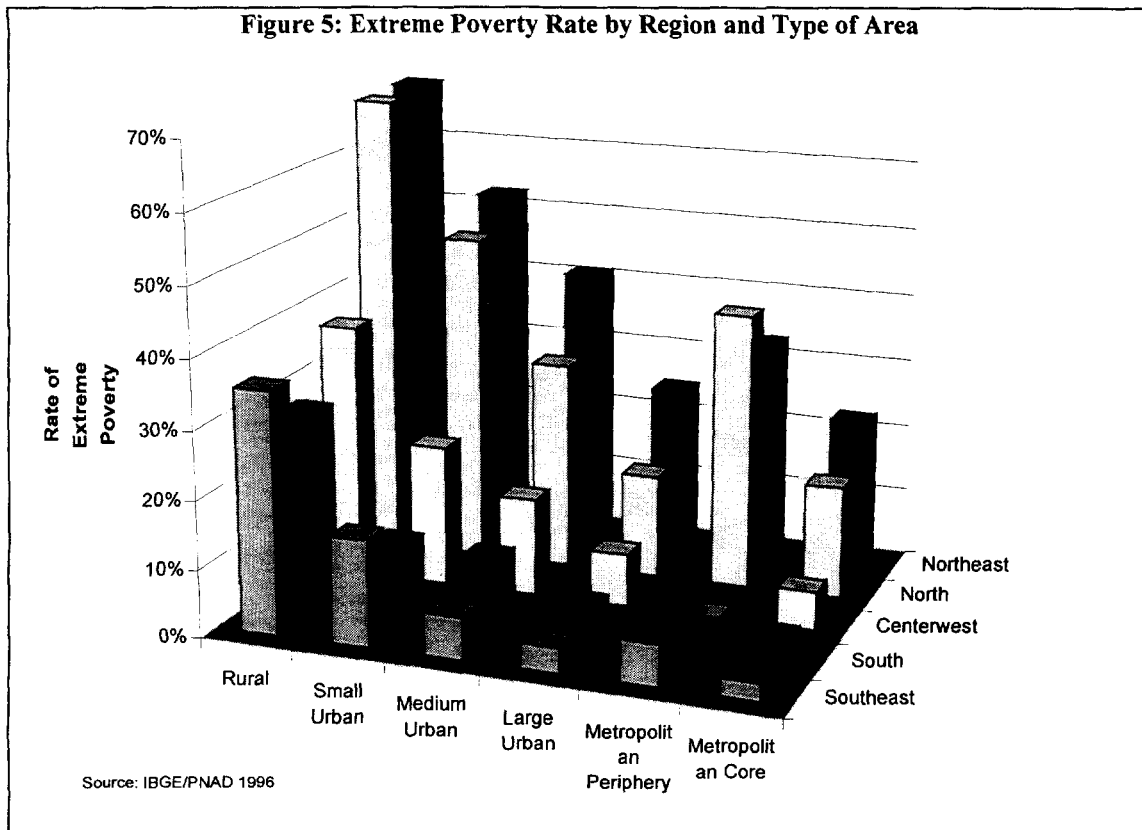
33. The extreme poverty line used in this report is carefully calculated and considered reasonable. However, other poverty lines derived from slightly different methodologies are equally defensible. The use of a particular poverty line is mainly an analytical device that should not be given excessive importance. In fact, this report puts very little emphasis on the absolute number of poor, which depends on the particular poverty line chosen. More important than the number of poor is the understanding of the relative distribution of poverty in different regions or in different population subgroups, and the share that different subgroups have in overall poverty. It is important to note that Brazil's Government has not yet defined a particular "official" poverty line, which otherwise would have been used in this report.

34. The poverty profile of this report represents a number of important improvements over earlier poverty profiles. In particular, this profile includes an estimate of the imputed rent for owner-occupied housing in the income measure, differentiates by size of urban areas, and uses the LSMS to calculate deflators of income for regional price differentials.

35. While the analysis in this report focuses on the current income of the poor, the assets of the poor are also of importance and considered in the discussion of poverty profiles



produce a sharper profile of the poor (the higher the poverty line used, the more closely the profile of the poor resembles the profile of the overall population). Alternatively, a poverty line that incorporate non-food expenditures has been determined as



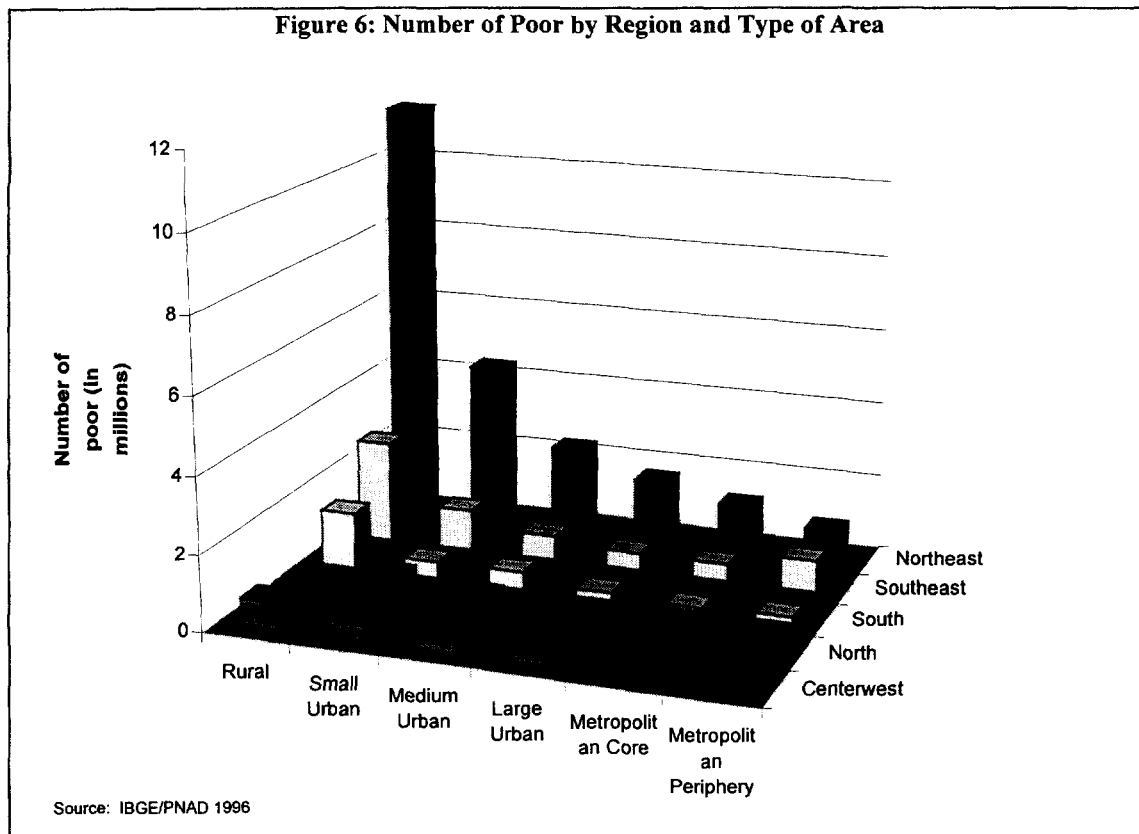
and policies. First, because these assets (such as human capital) generate current income. Second, because they provide assurance of, and insurance for, future income. Assets can help the poor smooth consumption in case of income shocks (those who have education and housing can smooth consumption better than those with the same income that do not own such assets). Owned housing is the only asset that is explicitly incorporated into the income estimates of the poverty profiles of this report.

36. The use of a simple income-based poverty profile obscures several conceptual and methodological challenges and deficiencies of the chosen approach. First, poverty is not necessarily or exclusively a condition characterized by insufficient income; rather, it is a condition of unacceptable deprivation, which can have and typically has additional reasons other than income below a certain level. In particular, income or consumption based measures of poverty ignore the important contribution of access to unpaid services (health, education, water, environmental

quality, security) to well-being. While a variety of public services are included in the profiles compiled for this report, the broader concern about the limitations of income poverty measurements is not comprehensively addressed. Instead, the focus on a uni-variate, money-metric measure of poverty is maintained in order to permit the quantitative analysis of targeting of social spending. However, in the discussion of policy implications, care is taken to avoid conclusions that would be very sensitive to the narrow poverty definition used in the quantitative analysis of this report.

Where are the poor?

37. At the chosen extreme poverty line, Brazil has a poverty headcount ratio (poverty rate) of 22.6%. This means 34.9 million Brazilians live in households with a per-capita income below the poverty line. Using the higher poverty line of R\$132, the poverty rate would be 45.3% equivalent to 69.9 million Brazilians. A little more than half of



the poor (52.5%) live in urban areas. Of the urban poor, 39% live in urban areas with a population less than 20,000; 23% live in urban areas with a population between 20,000 and 100,000, 16% in urban areas with more than 100,000 inhabitants, and finally 21% in the metropolitan areas.² In terms of geographical distribution, 57% of the urban poor live in the Northeast, 19% in the Southeast, 11% in the North, 7% in the South and 6% in the Centerwest. Figure 5 shows the extreme poverty rate in different regions and areas. Figure 6 shows the absolute number of poor in those regions and areas. Finally, Table 4 shows the distribution of Brazil's poor between regions and areas.

38. Overall, there is a strong concentration of the poor in the Northeast and in the rural, small, and medium sized urban areas, both in terms of absolute numbers and in terms of

poverty rates. Both in absolute terms (number of poor) as well as in relative terms (poverty rate), poverty is worst in rural areas; within urban areas, poverty improves with urban size; and poverty is least severe in the metropolitan core areas. The concentration of urban poverty in small urban areas remains high even if the agriculture-based population in the small urban areas (23% of the population and 33% of the poor in the urban areas up to 20,000 inhabitants) is excluded. The poverty profile presented here stands in contrast with the common perception of poverty in Brazil associated with *favelas* in the mega-cities of São Paulo and Rio de Janeiro, where poverty is most visible. In fact the poor of the Metropolitan Areas of São Paulo, Rio de Janeiro, and Belo Horizonte together (core and periphery) only constitute 3.7% of Brazil's poor or 7% of Brazil's urban poor. While crowding effects (crime, pollution) are likely to imply additional deprivation for the metropolitan poor not captured by income based poverty measures, overall, more attention must be given to the much larger number of poor in

² Urban area here refers to the urban population within each municipality. In many cases, several municipalities together form an urban agglomeration, which thus has a larger total urban population than each of the municipalities.

rural areas as well as small and medium sized urban areas.

39. Poverty rates are strongly related to the average income of the respective region. Figure 7 shows this relationship for each region and for each type of area. This analysis allows the useful distinction between poor people in poor areas and poor people in rich areas. Applying an arbitrary cutoff of R\$160 per capita average income, 35% of the population and 75% of the poor would be classified as living in poor areas, consisting of all rural areas, the small urban areas of the Northeast, North, and Centerwest, and the medium sized urban areas and

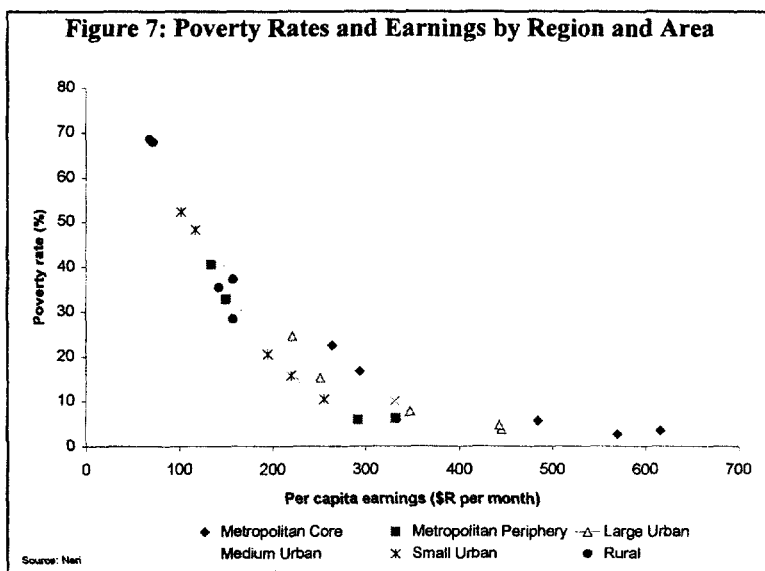
South and Southeast, the medium and large sized cities of the Centerwest, and the metropolitan core of the Northeast.

40. The poverty profile and data on migration and poverty, which show that non-migrants are typically among the poorest, followed by recent migrants and other migrants, are consistent with a situation where a large pool of rural poor migrate once the costs of migration (transport, transitional unemployment, retraining for a different labor market) are offset by the benefits of economic opportunities in the urban areas. The costs of migration to small urban areas, which are closer to and more integrated with

the rural economy, are less than the costs of migrating to large cities. Poverty thus remains relatively high in small urban areas with low migration costs. With more resources for social policies and higher costs of migration, bigger cities can achieve lower poverty rates. This situation shows a positive picture of urban areas that have in fact absorbed many poor migrants and transformed them into non-poor. The negative aspect of this situation is that urban poverty, especially in the smaller urban areas, can unlikely be resolved until the large pool

of rural poor has been absorbed or unless rural poverty can be addressed directly, an issue dealt with in the companion report on rural poverty reduction.

41. Compared to previous work, the poverty profile presented in this report shows a sig-



metropolitan peripheries of the Northeast and North (shaded in Table 4). Excluding rural areas from this analysis, 18% of the urban population and 52% of the urban poor live in poor urban areas. The rich areas housing 65% of the population and 25% of the poor would include all urban areas of the

Table 4: Distribution of Poor by Region and Area

Share of total poverty	Northeast	Centerwest	North	Southeast	South	Total
Metropolitan Core	3.6%	0.2%	0.4%	1.3%	0.3%	5.8%
Metropolitan Periphery	2.4%	0.0%	0.1%	2.4%	0.5%	5.4%
Large Urban	4.8%	0.7%	1.1%	1.3%	0.6%	8.5%
Medium Urban	6.6%	0.7%	1.7%	1.9%	1.3%	12.2%
Small Urban	12.5%	1.2%	2.4%	3.1%	1.2%	20.5%
Rural	32.7%	2.1%	0.7%	7.7%	4.3%	47.5%
Total	62.7%	5.0%	6.4%	17.7%	8.1%	100.0%

"Poor Areas" (per capita earnings less than R\$160 per month) are shaded in gray.

Table 5: Probit Regression – Poverty and Characteristics of the Poor

Variable	DF/dx	P > z
Demographic Variables		
Household size	0.0838	0.000
{Household size} ²	-0.0035	0.002
Proportion of household aged < 5	0.7788	0.000
Proportion of household aged 5-15	0.4635	0.000
Proportion of household aged > 65	0.0050	0.949
Characteristics of Household Head		
Age	0.0050	0.204
{Age} ²	-0.0001	0.176
Years of schooling	-0.0229	0.000
Female dummy	-0.0038	0.882
Black dummy	-0.0304	0.445
Mulato dummy	0.0157	0.490
Indigenous dummy	0.1870	0.183
Self-employed dummy	0.0970	0.153
Unemployed / Unpaid	0.0688	0.300
Employee	-0.0530	0.368
Housing Characteristics and Access to Services		
Dirt floor in house	0.1226	0.011
Number of Bedrooms	-0.0676	0.000
Dirt Road outside	0.0178	0.494
Favela dummy	0.0648	0.114
Piped Water	-0.1129	0.001
Electricity	-0.1374	0.003
Phone	-0.2281	0.000
Regional Dummies		
Northeast – Other Urban	0.5367	0.000
Recife Metropolitan Region	0.5325	0.000
Salvador Metropolitan Region	0.4889	0.000
Fortaleza Metropolitan Region	0.3603	0.000
Northeast - Rural	0.3549	0.000
Rio Metropolitan Region	0.1973	0.000
Southeast - Rural	0.1940	0.001
Belo Horizonte Metropolitan Region	0.1249	0.002
Southeast – Other Urban	0.0909	0.025

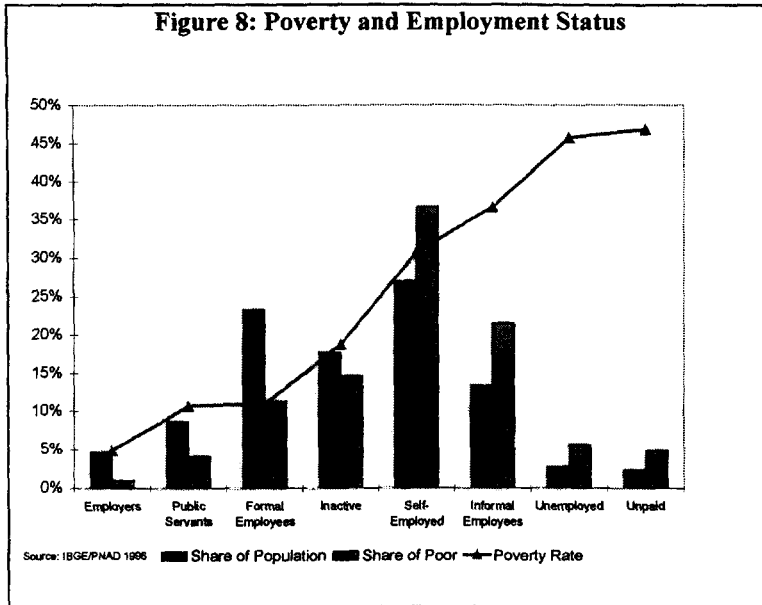
Shading denotes significant variables.

nificantly larger share of rural poverty in Brazil's total poverty. A 1996 poverty profile by Rocha (2000a), for example, shows rural areas contributing with only 25% to Brazil's total poverty. What explains these differences?

- (a) The rural poor are concentrated at the very bottom of the income distribution. This means that a lower poverty line will show a higher concentration of poverty in rural areas. While the extreme poverty line used in this report yields a concentration of 47.5% of Brazil's poor in rural areas, a higher poverty line of R\$132 brings this concentration down to 35.6%.
- (b) The poverty profile in this report reflects regional price differences but not differences in the composition of the con-

sumption bundle of the poor in different parts of the country. This important methodological difference is discussed in Ravallion and Bidani (1994) and Ferreira and Litchfield (1996).

- (c) Finally, the absence of reliable consumption price indices for non-metropolitan areas currently obstructs any effort to construct a spatially differentiated poverty profile in Brazil. The profiles in this report use regional price indices constructed from the PPV, which suffer from the small sample size of this survey. Other profiles have used price indices for non-metropolitan areas that were extrapolated from the Endef survey of the mid 1970s (see Rocha 2000b).



42. All PNAD-based profiles suffer from weaknesses of the PNAD questionnaire with respect to the measurement of household welfare. For example, the simple income question of the PNAD questionnaire is unlikely to adequately capture income from sources other than regular employment, and is likely to underestimate rural income and thereby overestimate rural poverty. Robustness tests done with PPV-based consumption measures confirm the overall poverty rankings obtained from PNAD income analysis. However, they also confirm the substantial overestimation of poverty in rural areas by using PNAD income data. Preliminary analysis combining PPV and PNAD data to overcome the shortcomings of the PNAD questionnaire show that the share of the rural poor in all poverty of Northeast and Southeast Brazil taken together is about 43%. Analysis to rectify this limitation is underway (see Lanjouw 2000). Nevertheless, PNAD data is the only source available for national comparative analysis, and despite its shortcomings, the compilation of an income based poverty profile remains a powerful analytical tool.

Who are the poor?

43. Two approaches are used to gain a better understanding of who are the poor and what

are their characteristics. First, the poverty profiles contain a number of personal characteristics of the head of household (age, race, gender, schooling, immigration, economic activity, sector) and variables related to housing and urban services (housing situation, water, sewage, garbage and electricity). In the profiles, the overall population is broken down into subgroups with certain characteristics (level of schooling or public services, or example). The profiles show the poverty rate of each subgroups and the contribution of each subgroup to overall poverty.

The profiles thus give a sense of the poverty risk of different subgroups on the characteristics of the main subgroups of the poor.

44. The second approach uses a probit regression³ to estimate poverty risk as a function of demographic, personal, housing, and regional household characteristics. This approach analyzes the relationship between each of the characteristics and poverty, taking the effect of other characteristics into account.

45. In both cases, the relationship between poverty and population characteristics is purely descriptive and should not be misinterpreted as a causal relationship. For example, the strong correlation between the absence of sanitation services and poverty should not be interpreted to mean that the absence of sewage pipes causes poverty. More likely, poor families do not have sufficient income to afford housing in areas covered by sanitation services.

46. Location (region and area) is the strongest explanatory variable (in a statistical sense) for poverty. Even after controlling for other household characteristics, location

³ The probit regression estimates the probability of being poor as a function of different household characteristics, thus estimating a marginal effect of each variable on poverty risk.

Table 7: Main Factors Associated with Poverty

Factors that independently explain poverty risk (significant probit coefficients)	Factors that are associated with high poverty risk (poverty rate > 30%)	Factors that are present in a large share of the poor population (share among poor > 15%)
<ul style="list-style-type: none"> Location in Northeast and/or non metropolitan areas Low levels of schooling High dependency ratio (large household size, large share of children in household) Poor quality of housing and urban services 	<ul style="list-style-type: none"> Location in North and Northeast and/or non metropolitan areas Low levels of schooling High dependency ratio Squatter housing, no access to urban services Black (understood as the sum of the <i>preto</i> and <i>pardo</i> responses in the PNAD surveys) or indigenous race Non-migrant Unemployed, self-employed or informally employed 	<ul style="list-style-type: none"> Location in Northeast and Southeast and/or non metropolitan areas Low levels of schooling High dependency ratio Own house and land, no sanitation but other urban services Black race Non-migrant or long-term migrant Self-employed or informally employed

remains powerful in explaining poverty. This means that households with the same characteristics are more likely to be poor in poor than in rich areas. In other words, poverty in poor areas is not just related to a larger number of households with characteristics that are related to poverty (low education, large number of children, etc.) but directly linked to the low average income of the area. This finding points toward the importance of migration and/or regional development policies.

47. The profile of the poor in rich areas includes less people with the typical characteristics of the poor (low education, large num-

ber of dependents, low level of public services) since the share of the population with such characteristics is far less in the rich areas. For example, both highly and less educated people are more likely to be poor if they live in the Northeast rather than the Southeast. However, there are many more less-educated people in the Northeast. Therefore, the share of poor with low education is higher in the Northeast than in the Southeast.

48. Household size is strongly correlated with poverty. Poverty rates increase with the dependency ratio (share of income earners over non-income earners in the house-

Table 6: Transition Probability Matrix Between Employment Classes

	Previous Employers	Public Servants	Formal Employees	Inactive	Self Employed	Informal Employees	Unpaid	Unemployed
Current Employers	4.38%	0.00%	0.04%	0.03%	0.26%	0.02%	0.01%	-
Public Servants	-	8.53%	0.10%	0.05%	0.01%	0.02%	-	0.01%
Formal Employees	0.02%	0.07%	22.68%	0.16%	0.07%	0.16%	-	0.12%
Inactive	-	0.02%	0.07%	17.22%	0.16%	0.12%	0.02%	0.09%
Self Employed	0.41%	0.03%	0.30%	1.16%	24.30%	0.70%	0.03%	0.08%
Informal Employees	0.03%	0.11%	1.16%	0.65%	0.55%	10.63%	0.03%	0.17%
Unpaid	0.04%	0.01%	0.02%	0.27%	0.10%	0.13%	1.82%	0.00%
Unemployed	0.00%	0.02%	0.38%	0.52%	0.16%	0.35%	0.01%	1.34%

hold). The probit analysis shows household size as well as the share of children to be strongly independent explanatory variables of poverty. The significant effect of household size remains even if reasonable parameters for economies of scale at the household level are considered (where the household equivalence scale parameter is between 0.7 and 1.0).⁴

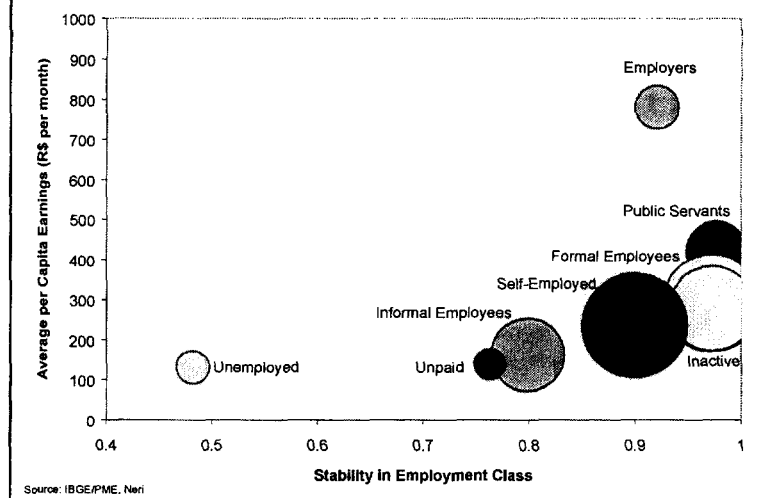
49. The strong negative relationship between schooling and poverty is striking. Poverty rates fall from 46% among those with less than one year of schooling to 5% for those with 8 to 12 years of schooling. 74% of the poor live in households where the head of household has less than four years of schooling. It is important, however, to add that the probit analysis suggests that the quantitative effect of schooling is not as strong as location (or wealth of the area, which is captured by the location variable). For example, the move of a household from Fortaleza to São Paulo (an area with 2.3 times higher per capita earnings) would have the same effect in terms of reducing the probability of poverty as a hypothetical increase in the education of the head of household by 15.7 years.

50. Race and gender of the head of household do not independently explain poverty. Female-headed households, in fact, show a lower poverty rate than male headed households (an issue where premature policy conclusions based on income-poverty alone should be avoided given, for example, the additional burden on single parent households). While race does not independently explain poverty, black-headed

households are 2.7 times more likely to be poor as white-headed households. While black-headed households constitute 45% of the general population, they constitute 69% of Brazil's poor. This means that race is closely related to other explanatory factors of poverty, such as low levels of schooling and location in poor areas, but does not independently explain a higher probability of poverty. This finding, while interesting, should be treated with caution and subjected to further analysis since previous studies have found different results, and the current study has not particularly focused on issues related to race and gender.⁵

51. Employment status also does not independently explain poverty. However, the unemployed, the self-employed and the informally employed have much higher poverty rates. Most of the poor (80% overall, and 69% in urban areas) are economically

Figure 9: Earnings and Stability of Different Employment Classes



active but most of them work outside of the formal sector (63%). While the poverty rate among the unemployed is very high (46%), the unemployed make up only a small share of the poor (6%).

52. There is a relatively clear hierarchy of employment status of the head of family

⁴ The equivalence scale parameter refers to household-level economies of scale. A value of 1 (used in the profiles of this report) implies no economies of scale. A value of 0 implies maximum economies of scale where per capita income is equal to household income regardless of the number of household members.

⁵ For a recent review of issues relating to Poverty and Race in Brazil, see Silva (1999).

Table 8: Poverty Profile - PNAD 1996 – Household Characteristics

Variable	Value	Population of Poverty Rate of		Share of Poor from Group
		Group	Group (%)	
Total		154,360,589	22.59	100.00
Region	North	7,471,280	30.06	6.44
	Northeast	45,675,461	47.89	62.72
	Centerwest	10,511,704	16.63	5.01
	Southeast	67,291,618	9.19	17.73
	South	23,410,526	12.08	8.11
Zone	Metropolitan Core	27,206,571	7.47	5.83
	Metropolitan Periphery	18,742,440	10.07	5.41
	Large Urban	29,155,920	10.22	8.55
	Medium Urban	24,217,086	17.58	12.21
	Small Urban	23,188,557	30.82	20.49
	Rural	31,850,015	52.03	47.52
Dependency Ratio	$d \leq 2$	7,252,749	4.51	9.38
	$2 < d \leq 3$	3,372,498	23.44	22.67
	$3 < d \leq 4$	2,100,240	33.36	20.09
	$d > 4$	2,363,549	58.28	39.49
Housing	Own House already Paid with Own Land	9,841,375	22.37	63.12
	Own House already Paid without Own Land	8,636,754	42.00	10.40
	Own House Still Paid	9,356,977	5.26	1.41
	Rent	1,887,417	10.64	5.76
	Ceded	1,806,657	35.75	18.52
Water	Canalized	12,594,315	13.04	47.08
	No Canalized	2,818,488	65.19	52.68
Sanitation	Sewage System	5,841,609	5.47	9.15
	Septic Tank (Cement)	3,556,189	12.77	13.02
	Other	6,038,259	44.96	77.83
Electricity	Yes	14,190,554	18.25	74.26
	No	1,220,322	72.87	25.50
Garbage	Collected	1,090,109	10.16	31.77
	Others	4,534,961	52.48	68.23

(see Figure 8 and Figure 9). Outside of a small group of unpaid workers with very low income, poverty is highest among the unemployed. However the total number of unemployed is low and the duration of unemployment relatively small, making the unemployed a very small share of the poor. Next come informal employees with a high poverty rate, medium stability, low income, and a significant participation in the poverty share. Informal employees are followed by the self-employed who have a higher income, lower poverty rates, higher stability, and contribute the largest share to the total number of poor. Inactives have a higher income, less poverty, and more stability, suggesting that this group includes many pensioners and households that can afford economic inactivity because of other sources of income. Formal employees have similar average incomes and stability, lower poverty, and a lesser participation in the poverty share. Finally, public employees and employers have the lowest poverty rate and the smallest participation in the poverty share.

53. Figure 9 shows the earnings of different employment classes on the vertical axis and stability (probability that someone remains in the same employment class after four months) on the horizontal axis. The size of the bubbles shows the relative share of the employment class in the economically active population. With the exception of employers, higher earnings go along with higher stability. Members of lower employment classes, in particular the unemployed, make a strong effort to transition quickly into a higher class. At the other end of the spectrum, those in higher classes, in particular formal employees and public servants, enjoy significant protection from job loss and show high stability.

54. Interestingly, there is significant mobility between employment classes. Table 6 shows the share of the population by current employment class (rows) and previous employment class (columns) over a period of four months. The main channels for social ascent are from unemployed to informal or

Table 9: Poverty Profile - PNAD 1996 –Characteristics of the Household Head

Variable	Value	Population of Group	Poverty Rate of Group (%)	Share of Poor from Group
Total		154,360,589	22.59	100.00
Gender	Men	126984231	23.30	84.85
	Women	27376358	19.30	15.15
Race	Indigenous	266456	47.20	0.36
	White	83766760	12.66	30.39
	Black	69574024	34.64	69.09
	Asian	717026	4.53	0.09
Age	24 Years or Less	6131477	27.45	4.83
	25 to 44 Years	74706190	24.59	52.66
	45 to 64 Years	56240484	21.65	34.92
	65 Years or More	17282438	15.33	7.60
Years of Schooling	Less than 1 Year	33736000	46.22	44.71
	1 to 4 Years	30926064	32.95	29.22
	4 to 8 Years	46469495	15.78	21.03
	8 to 12 Years	31730098	5.44	4.95
	More than 12 Years	11498932	0.30	0.10
Immigration	No Immigrant	62607994	30.23	54.26
	0 to 5 Years	11586380	21.37	7.10
	6 to 9 Years	6554027	20.39	3.83
	More Than 10 Years	44570097	17.94	22.93
Working Class	Inactive	27321086	18.71	14.65
	Unemployed	4280407	45.81	5.62
	Formal Employee	35973949	10.96	11.30
	Informal Employees	20534217	36.60	21.55
	Self-Employed	41671363	30.66	36.63
	Employer	7345936	4.95	1.04
	Public Servant	13473182	10.66	4.12
	Unpaid	3693735	46.89	4.97
Sector of Activity	Agriculture	30272323	52.44	45.52
	Manufacturing	18751253	15.80	8.49
	Construction	12411872	18.48	6.58
	Services	48621830	11.22	15.64
	Public Sector	12699084	9.62	3.50

formal employment, from informal employment to formal employment and self-employment, and from self-employment to formal employment or employer status. Social descent occurs principally from self-employment to informal employment.

55. Given the high share of the self-employed among the poor, there is particular interest in understanding the nature of this group. A 1994 IBGE survey on the informal economy in the Municipality of Rio de Janeiro sheds some light on who these self-employed are. Rio de Janeiro had 444,420 informal enterprises, 91% of which were the enterprises of self-employed (rather than employers). Of the self-employed, 23% were devoted to commercial activities and 56% offered different services. Only 20% had their own location (store or workshop), the rest operated out of the home, vehicle, or on public space. 53% had operated for more than five years. Only 19% of the self-

employed had revenues above R\$1,000 per month. 93% of the enterprises were not registered. 64% of the enterprises had made investments in the previous year. However, only 3% of those who made investments had received any form of loan.

56. Most poor live in their own house on their own land. The poverty rate of those living in their own house but not on their own land (presumably *favelas* and other irregular settlements) is very high but the overall contribution to poverty small. It is also interesting to note that residence in a *favela* is not significantly related to poverty. Finally, poverty rates are much higher among those households without access to public services (water, sewage, garbage collection). Even though country-wide electrification rates are high, a quarter of the poor still live without access to electricity. 52% of the poor have no canalized water, 68%

Table 10: Changes in the Poverty Profile 1993-1996-1998

Characteristics of the Sub-Groups	Poverty Headcount Rate			Change 1993-98	Contribution to Poverty			Change 1993-98
	1993 (%)	1996 (%)	1998 (%)		1993	1996	1998	
Total	34.2	23.9	22.0	-35%	100.0	100.0	100.0	0%
North	41.4	31.3	30.7	-26%	5.5	6.2	6.7	22%
North-East	63.5	50.5	47.8	-25%	54.7	61.7	62.7	15%
Center-East	25.6	17.2	13.7	-46%	5.1	4.9	4.3	-16%
South-East	20.8	10.3	8.8	-58%	26.3	18.7	17.3	-34%
South	18.1	12.8	12.4	-31%	8.5	8.5	9.0	6%
Metropolitan Core	18.6	7.6	7.0	-62%	6.5	5.2	5.2	-19%
Metropolitan Periphery	27.4	10.3	8.7	-68%	7.1	5.3	4.8	-33%
Large Urban	23.1	10.3	9.7	-58%	9.6	8.0	8.1	-16%
Medium Urban	25.5	17.8	14.7	-42%	13.9	11.7	10.5	-25%
Small Urban	30.3	31.2	28.8	-5%	20.4	19.6	19.7	-3%
Rural	62.0	54.0	51.4	-17%	42.5	50.2	51.7	22%
Piped Water	21.3	13.7	12.4	-42%	47.2	46.6	46.5	-2%
No Piped Water	74.6	68.5	67.8	-9%	52.8	53.2	53.3	1%
With Electricity	28.1	19.2	17.9	-36%	72.7	73.4	75.6	4%
Without Electricity	80.2	76.5	77.2	4%	27.3	26.4	24.2	-11%
Male	34.3	24.1	22.3	-35%	99.2	98.6	98.1	-1%
Female	23.6	14.4	13.1	-45%	0.8	1.4	1.9	143%
Indigenous	72.9	51.7	28.7	-61%	0.3	0.3	0.3	24%
White	21.1	13.7	11.8	-44%	33.1	31.4	28.8	-13%
Black	49.9	36.7	34.4	-31%	66.5	68.2	70.8	7%
Asian	8.4	4.3	3.4	-60%	0.1	0.1	0.1	-37%
0-24	41.3	29.7	28.5	-31%	5.0	5.0	5.0	0%
25 to 44 Years	36.0	25.2	23.8	-34%	56.7	54.9	55.7	-2%
45 to 64 Years	32.9	23.1	21.1	-36%	32.8	34.1	34.0	4%
>65 Years	23.6	16.6	13.0	-45%	5.6	6.0	5.2	-6%
No Immigrant	41.5	31.9	29.1	-30%	48.0	54.7	55.9	16%
0 to 5 Years	37.1	22.7	21.1	-43%	9.9	7.4	7.0	-30%
6 to 9 Years	32.6	21.2	19.3	-41%	4.3	3.9	3.7	-15%
More Than 10 Years	28.9	18.8	17.6	-39%	24.0	22.1	22.5	-6%
Inactive	26.3	19.2	15.6	-41%	7.7	9.5	8.6	12%
Unemployed	69.8	50.9	42.2	-40%	4.5	5.7	6.1	34%
Formal Employees	22.5	11.7	10.4	-54%	17.7	12.6	11.9	-33%
Informal Employees	57.8	40.0	36.7	-37%	22.8	22.8	21.8	-4%
Self-Employed	42.8	31.7	31.0	-27%	37.3	39.7	42.6	14%
Employer	9.1	5.2	4.3	-53%	1.6	1.2	1.2	-27%
Public Servant	22.5	11.1	13.4	-40%	6.7	4.0	5.2	-22%
Unpaid	39.5	50.8	35.3	-11%	1.7	4.3	2.6	49%
Other/Not Specified	29.9	64.6	45.1	51%	0.0	0.1	0.1	224%
Agriculture	60.2	54.2	52.3	-13%	41.9	49.9	48.9	17%
Manufacturing	24.9	16.0	14.6	-41%	10.8	9.3	8.6	-20%
Construction	39.5	19.5	20.7	-48%	11.4	7.9	9.7	-15%
Services	21.2	10.8	10.0	-53%	19.0	14.4	14.7	-22%
Public Sector	18.3	10.0	8.8	-52%	4.6	3.4	3.3	-28%

have no garbage collection, and 78% have neither sewage connection nor septic tanks.

57. In summary, the factors most strongly associated with poverty are location (in terms of region and city size, reflecting the relative wealth of the location), education levels, household size, and absence of urban services, as shown in Table 7.

58. The poverty profile (Table 8 and Table 9)⁷ permits an interesting comparison be-

tween population groups at a high risk of poverty and those with a high share in the total number of poor. For example, inhabitants of the North face the second highest risk of being poor but (due to the small size of the total population of the North) their share in total poor is small. In contrast, the Southeast has the lowest poverty rate, however, as the most populous region it houses the second largest total share of poor. The unemployed face a very high risk of poverty but constitute a very small share of the poor.

⁷ Poverty profiles for different poverty lines, for different regions and areas of the country and containing different

poverty measures (P0, P1, and P2) are available in the background material referenced at the end of this report.

Table 11: Poverty and Characteristics of the Poor by Region and Type of Area

	By Region	By Type of Area
Demographics	For each dependency ratio, poverty rates higher in poorer regions. Share of the poor with high dependency ratio somewhat higher in rich areas.	For each dependency ratio, poverty rates higher in smaller cities. Similar contribution to poverty share by city size.
Housing and Urban Services	For each service level, higher poverty rates in poor areas. No difference in housing situations but much higher levels of services for the poor in richer regions.	For each service level, higher poverty rates in smaller cities. No difference in housing situations, but much higher levels of services for the poor in larger cities.
Gender	Poverty rates higher among male headed households in all regions In all regions, about 15% of poor households are headed by females.	In all urban areas, households headed by females have somewhat higher poverty rates. Share of poor households that are headed by females rises from 10% in rural areas to 30% in capitals.
Race	Higher poverty rates for households headed by blacks in all regions; regional distribution dependent on ethnical composition of regions (low black share in the South).	Difference in poverty rates between black and white headed households increases with city size, but share of black headed households in poverty are similar regardless of city size.
Schooling	For each level of schooling, poverty rates higher in poorer regions. Share of low levels of schooling among poor declines in richer areas.	For each level of schooling, poverty rates are higher in smaller cities. Share of low levels of schooling among poor declines in larger cities.
Migration	In the Northeast, migrants are relatively less poor than non-migrants, in comparison with other regions	The poverty advantage of migrants over non-migrants is clear in rural areas and mixed in different sized urban areas. The share of recent migrants among the poor is largest in large cities and metropolitan peripheries.
Activity (Employment)	For each activity, poverty rates are much lower in richer areas. In the richer areas a higher share of the poor is inactive, unemployed, or formally employed.	For each activity, poverty rates are much lower in wealthy areas. The shares of the poor who are inactive, unemployed, and formally employed increases with city size. The shares of informal and self-employment decline with city size.

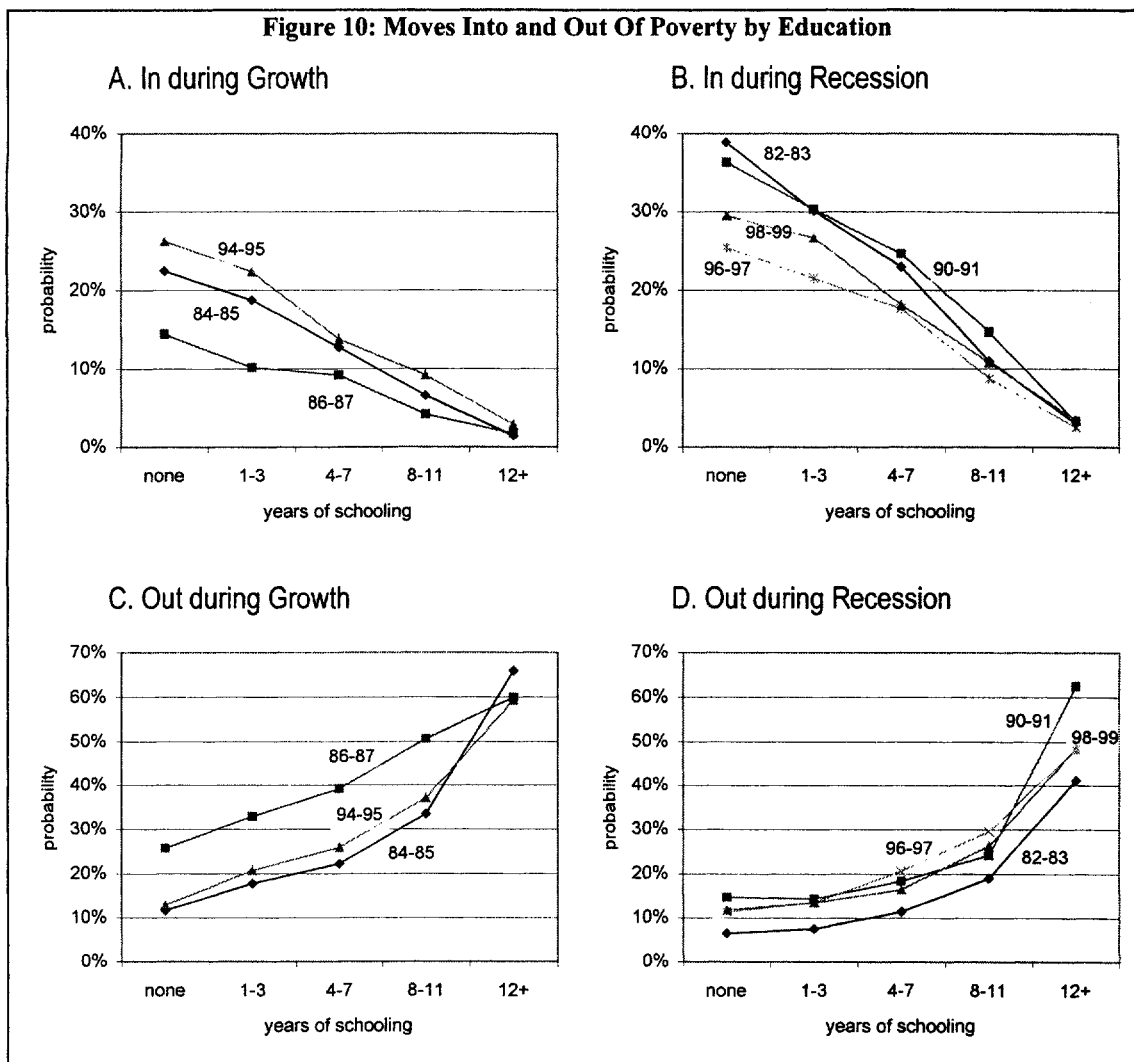
Some of the differential characteristics of the poverty profiles for different regions and different areas (by city size) are captured in Table 11.

Changes in the Poverty Profile from 1993-1998

59. A comparison of the poverty profiles from the PNAD household surveys of 1993, 1996, and 1998 provides valuable insight into the changes in the poverty profile over time. The most interesting findings from the analysis of Table 10 include:⁸

- (a) Overall poverty rates have been reduced by 35% over a five year period. The positive trend has continued at a much smaller rate during the last two years of the period.
- (b) All subgroups of the population have seen reduced poverty rates over the five year period. The smallest reduction in poverty rates has occurred in the Northeast, North, and in small urban areas. The largest reduction in poverty rates has occurred in the Southeast, Center-west, and in the large cities and metropolitan areas.
- (c) As a result of the above trends and changes in the population, poverty has been further concentrated in rural areas, in the Northeast and North. In addition, poverty has been concentrated among

⁸ In order to ensure consistency between the three years, the methodology used for the compilation of this table is slightly different from the one used for the 1996 poverty profiles presented before. As a result, the poverty rate shown in this table for 1996 is slightly higher.



Source: PME/IBGE, Brazil - Selected Issues in Social Protection, World Bank, forthcoming.

populations with the other typical characteristics of poverty: indigenous or black, non-immigrant, inactive, unemployed or self-employed, uneducated, and employed in agriculture. In sum, there has been a trend toward homogenization and concentration of poverty among the main risk groups.

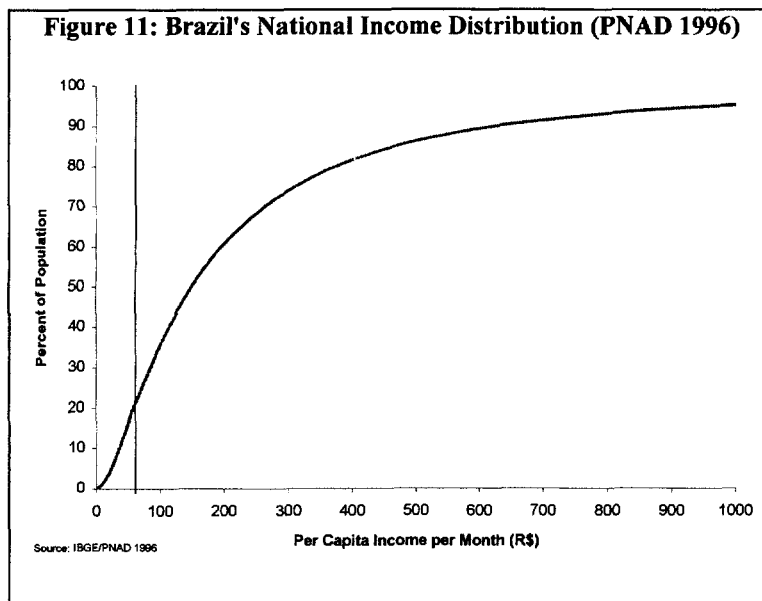
- (d) Among urban services, the coverage of water and sanitation services has declined among the poor while the coverage with electricity connections has increased.

Dynamics of Poverty, Social Risks and Social Mobility

60. Despite the lack of longitudinal data, the dynamics of poverty in Brazil is increasingly being studied. This report has not attempted to advance in this area. However, reference is made to analysis in the forthcoming World Bank report on selected social protection spending in Brazil. Analysis in that report is based on the Monthly Employment Survey (PME), which has a panel structure that permits the analysis of short-term movements into and out of poverty. The analysis confirms the relatively large share of the population that is constantly moving into and out of poverty, thus confirming the

importance of more detailed dynamic poverty analysis.

61. Figure 10 (from the forthcoming World Bank report on selected social protection spending in Brazil) shows the probabilities of workers moving into or out of poverty during episodes of growth and recession. It is interesting to note how alike expansions and recessions appear. This analysis allows an evaluation of the potential for poverty reduction through economic growth alone, at least for the metropolitan areas. During a period of expansion (A), a non-poor worker without any education has historically had a 20–25% probability of falling into poverty



one year later (this probability was markedly lower during 1986–87). At the same time (C), an uneducated poor worker has about a 12% probability of exiting poverty. Looking now at recessions (B), we see that a non-poor worker without any education has had a 30–40% probability of falling into poverty. Meanwhile, in (D), an uneducated poor worker has had about a 10–15% probability of exiting from poverty during recessions.

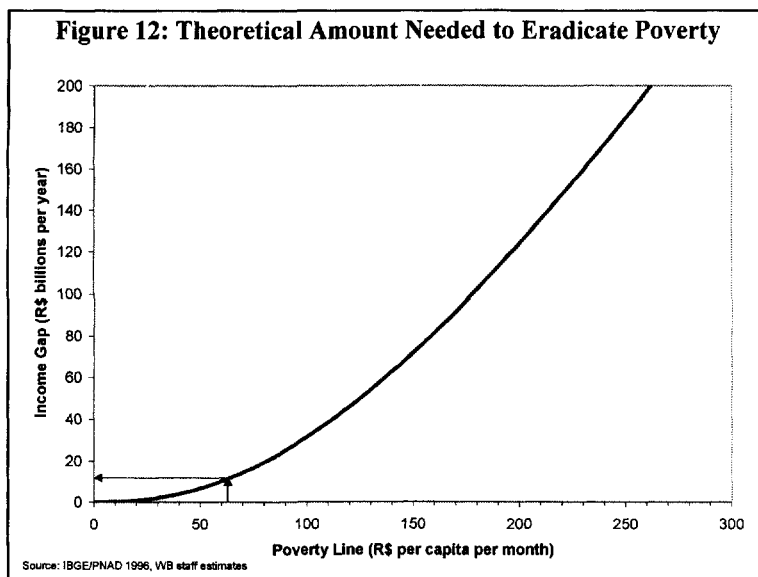
Inequality and Aggregate Income Gap

62. While the focus of this report is on poverty reduction and not income distribution, it is useful to keep certain characteristics of Brazil's income distribution in mind when discussing policy implications. The high income inequality of Brazil, with a Gini coefficient⁹ in the order of 0.58, is well known. Even at the disaggregate level of regions or areas, the Gini coefficient remains high, showing the very high level of interpersonal inequality even within regions and areas.

Whether inequality itself should be of concern is not the subject of this report. (It is worth noting, for example, that even if the income of all the poor were raised to the poverty line used in this report, the Gini coefficient would still remain very high at approximately 0.54). High inequality implies that Brazil's aggregate income gap is relatively small compared to macro-economic aggregates. In other words, theoretically and in aggregate, Brazil has the resources necessary for solving its poverty problems.

63. The aggregate income gap of Brazil's poor was R\$12 billion in 1996. This is the amount theoretically needed to bring every poor Brazilian up to the extreme poverty line for one year. The aggregate income gap constitutes less than 5% of the income of the wealthiest 10% of Brazilians. This amount is small compared to the size of the Brazilian economy and even small in comparison to social spending. It constitutes 1.6% of the 1996 GDP of R\$750 billion. These numbers show that Brazil has the financial capacity to solve its poverty problem, especially if interregional transfers

⁹ The Gini coefficient is a commonly used distributional measure with 0 describing total equality and 1 describing total inequality.



are considered. This statement does not mean to imply that the poverty problem should be solved through transfer payments to the poor. However, the fact that it could be solved in this way demonstrates the feasibility of an ambitious approach to poverty reduction in Brazil.

64. Figure 11 shows Brazil's national income distribution. This figure shows the poverty rate (on the vertical axis) for any poverty line chosen (horizontal axis). The R\$65 extreme poverty line is shown by a vertical line. Figure 12 shows (on the vertical axis) the annual amount of perfectly targeted transfers necessary to bring every Brazilian up to the poverty line (on the horizontal axis).

Non-Income Dimensions of Deprivation

65. While this report analyzes poverty mostly in terms of income, some other forms of deprivation and other factors related to well-being are explicitly captured through their inclusion in the poverty profiles. For example, education levels and access to public services such as water and city size are likely to have an effect on well-being independent of income, and these variables are included in the profiles. Two examples of other dimensions not captured by the pro-

files and briefly discussed in this section are the relationship between health status and city size, and issues related to violence and crime.

66. Health Status. One indicator of particular interest as a complementary measure of deprivation is infant mortality; first because of the wide data availability and second because of its intrinsic value as an indicator of the outcome of social policies. Simple regressions were used to analyze a municipal level data set based on the 1991 population census (IPEA and UNDP, 1998). As expected, infant mortality is closely and positively related with levels of income poverty, absence of water and sanitation, and illiteracy.

67. The analysis yields an interesting finding on the relationship between city size and infant mortality. When infant mortality is regressed only on city size, no significant relationship appears to exist. However, regressing infant mortality on city size, poverty rate, access to water, and illiteracy yields a strong positive relationship between city size and infant mortality with an estimated elasticity of 0.1. This means that infant mortality in a larger city would be significantly higher than in a smaller city with the same levels of access to water, illiteracy, and poverty. In reality, of course, larger cities have lower poverty, lower illiteracy, and higher coverage with water services, all of which are known to reduce infant mortality. Thus, there is no direct relationship between city size and infant mortality without controlling for the other variables.

68. The finding of a strong positive relationship between city size and infant mortality indicates an important area for further research and warns against simplistic conclusions based on an income poverty profile alone. Specifically, the finding provides a warning against a simplistic conclusion that

poverty in the larger cities is so small compared to other areas of the country that it does not require policy attention. This finding suggests that actual deprivation in larger cities is higher than suggested by income poverty data, emphasizing the need to continue directing attention to poverty problems in large cities as well.

69. Violence and Crime. Violence and crime have important but complex links with poverty that also emphasize the importance of non-income deprivation in large urban areas. In many parts of Brazil, violent crime has been increasing rapidly over the last twenty years. While violence is clearly concentrated in certain low income neighborhoods, poverty is not necessarily associated with violence. For example, the Northeast, Brazil's poorest region, is also the region with the lowest incidence of violent crime. This explains, why, *on average*, Brazil's poor do not view violence problems as a top priority, and yet studies undertaken in particular urban locations show a predominant concern with violence.¹⁰

70. Violence is most prevalent in areas where population density has increased rapidly but a corresponding "civic structure," consisting of formal institutions, such as the legal system and police, informal institutions of the community, physical investments, and social norms, has not yet been developed. Consistent with this view, violent crime is highly concentrated in the low-income neighborhoods of the metropolitan areas where population density is high, migration and population transition slows the formation of social capital, and government services are often precarious. While small in absolute numbers, homicide rates are highest in frontier states such as *Roraima* and *Rondônia*, where similar characteristics apply.

¹⁰ PPV data shows that violence ranks relatively low as a concern among the poor overall. However, the *Consultations with the Poor* study shows a predominant concern with violence in the urban centers included in that study (World Bank 1999b).

71. Both victims and criminals of homicide most often come from the group of 15-29 year old males. A large share of violent crime is related to the drug trade, which offers attractive income opportunities for young men especially in areas with limited opportunities in the formal economy. Related to drug trafficking is also the increasing availability of arms. While homicide rates for females are much lower, violence against women is also significant. Most violence against women is committed by family members or acquaintances.

72. The States' response to increasing violence has mostly been an effort to increase policing. As a result, a significant share of violent deaths involves either killings by or of members of the police force. Overall, the effort has not been sufficient to reduce the scale of the problem of violent crime. The share of homicides that ends up in the courts has been reported to be as low as 8%. Distrust of the police in poor neighborhoods is deep. In *Consultations with the Poor*, residents of low-income neighborhoods rank the police uniformly as the worst institution in urgent need of improvement, requiring both more police activities in poor areas but equally important changes in the way police operate and interact with the community.

73. Violent crime has negative consequences beyond the devastating effect on the directly affected families. In neighborhoods besieged by crime, opportunities to escape from poverty are drastically reduced. Residents are restricted in the hours in which they can leave their homes, forcing them to forego employment and education. Investments in small businesses are also undermined by the absence of basic public order and effective protection of property rights. In many neighborhoods, violent crime and the reduction of economic opportunities forms a vicious circle of social exclusion.

74. Actions against violent crime need to include a direct effort to increase police performance, improve legal innovations such as accessible conflict resolution mechanisms and effective witness protection programs,

and implement programs directed at social support for the main risk group of young males. At least equally important are policies that help create economic opportunities and build the civic structure of the affected neighborhoods. Improving the civic structure of the affected neighborhoods involves the successful integration of physical improvements (housing, water and sanitation, road access, and public lighting), social services, and effective policing.

Perceptions of Poverty by the Poor

75. A recent study¹¹ of the perceptions of the poor in urban Brazil was conducted in ten sites located in three Brazilian cities: Recife, Santo André and Itabuna. It involved discussions with 632 poor individuals who participated in discussion groups and/or individual interviews. While not intended to be nationally representative, the study still reveals important qualitative material for the understanding of poverty. This qualitative material merits reproduction to complement the quantitative poverty profiles of this report.

76. Poor people tend to equate poverty with powerlessness and impotence. The poor cannot fulfill their wishes or develop their capacities. The poor are regarded as vulnerable and at a greater risk because of their exposure to diseases resulting from lack of sanitation and garbage collection, and because they feel unprotected by the police. Other factors mentioned are exposure to the risks of land slides and floods. The factors that trigger crises leading to more deprivation are job dismissals, illness, death of a parent, breakdown of marriages, and evictions from squatted land. Poverty is not directly associated with gender or old age. In the discussion about the main causes of poverty, the groups converged on the conclusion that unemployment is the most important cause, followed by lack of schooling and

sanitation. Concerning the conditions that would enable an individual to move out of poverty, the groups virtually reached a consensus on two factors: access to education and employment with a regular income.

77. The groups of poor individuals expressed resentment towards society and felt socially excluded. A recurring theme was the stigma of poverty. The groups mentioned exclusion and discrimination from public institutions. These include health care units, where they are not treated with attention and respect and public schools where their children are often unable to attend because of insufficient resources and inadequate classroom space. Discriminatory practices toward the poor also include harassment by surveillance and security guards in shops, supermarkets, and banks. The stigma of poverty encompasses a socio-spatial dimension. Employers refuse to hire residents of *favelas*, particularly of the poorest areas that have a record of violence. *Favela* residents often resort to falsely reporting their addresses to hide their place of residence from prospective employers.

78. While there is a general sense of worsening conditions, the poor also report that there have been great improvements in well-being. Many of the poor feel that they have progressed because of improvements in the local infrastructure and in housing and because of self-help and government programs.

79. The most important negative trend is the decrease in formal employment and the resulting rise in income insecurity. The reduction of formal jobs has led people to work in the informal sector of the local economy, where they earn low salaries and lose all the security they enjoyed when in the formal sector. For most individuals, the rise in unemployment contributes to insecurity. Poorer individuals feel that opportunities for economic and social mobility have in general decreased, and this is largely associated with rising unemployment. However, this general perception of decreased economic and social mobility co-exists with a view

¹¹ *Consultations with the Poor* (World Bank 1999b). The following paragraphs summarize selective findings from that study.

that several avenues of social mobility remain open. It is generally agreed that education is the key to social mobility. However, it is a virtual consensus that it is nearly impossible for the poorest groups to move out of poverty.

80. A second very negative trend is the mounting violence. A common theme in all reports is that there has been a sustained increase in violence. According to several reports, this increase is due to the lack of employment opportunities. Many groups argued, however, that the increase in violence is caused by inadequate police pres-

factors associated with an escape from poverty are a stable job and education, followed by better urban services.

(c) The key problems that the poor want to see addressed are (in order of priority): unemployment, security and safety, inadequate housing and urban services, and health care.

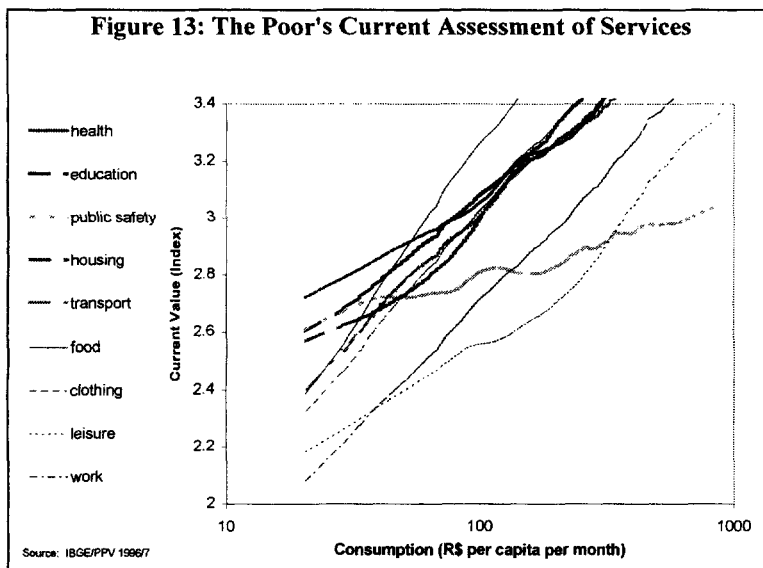
(d) The poor consider the Catholic church one of the most important institutions in the fight against poverty; neighborhood associations are also seen as crucial. NGOs external to the community, on the other hand, are often not considered im-

portant or particularly helpful. The attitudes toward governmental institutions are mixed. The views toward many service programs are positive. However, the poor unanimously regard the police as the worst institution in urgent need of improvement.

82. The perceptions of the poor in selected urban areas complement the quantitative poverty profiles in important aspects:

(a) Perceptions of the poor confirm the quantitative improvements in income and provision of public services; however, they highlight increasing insecurity resulting from the reduction of formal employment among the poor. Low statistical unemployment rates are compatible with the perception of high unemployment as the latter is casually understood as the absence of stable, well-paying jobs. At the same time, many poor depend on informal, temporary, or low-paying jobs, which means they are not technically unemployed.

(b) The poor emphasize powerlessness over their own lives, as well as exclusion

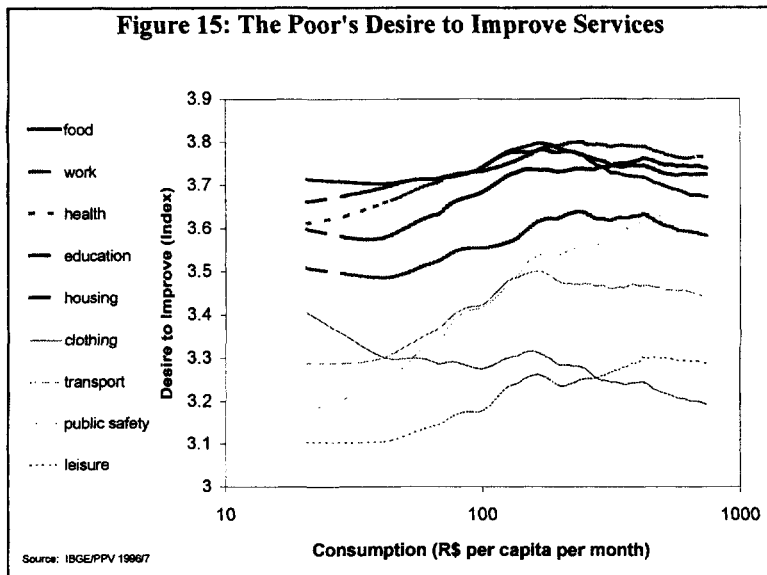


ence.

81. The self-assessment of the poor obtained from the *Consultations with the Poor* study clearly shows what the poor consider as the main escape routes from poverty:

(a) Poor individuals relate well-being with security, steady employment, a stable income, the availability of public services, and adequate housing.

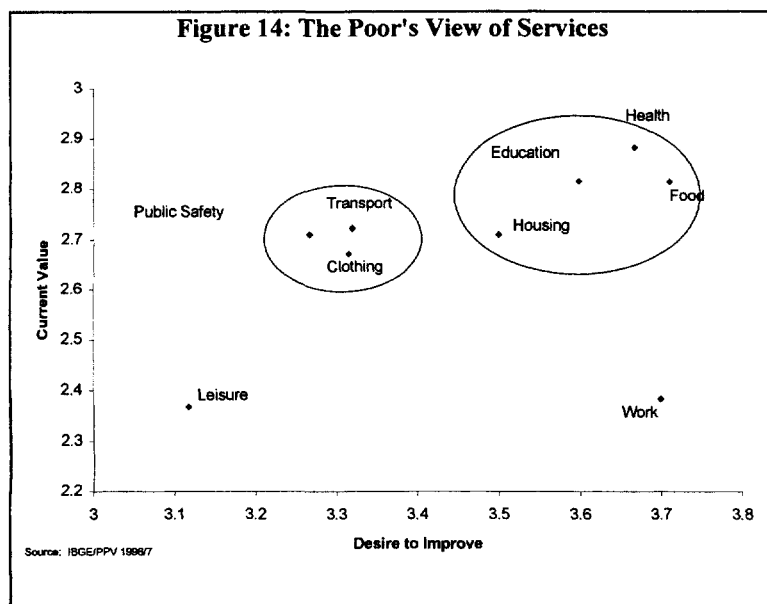
(b) Unemployment, followed by a lack of schooling and urban services, are considered the most important causes of poverty. Correspondingly, the two key



from public services and formal institutions, as a main attribute of poverty and a barrier preventing their escape from poverty.

- (c) The perceptions of the poor highlight the critical importance of crime and violence in impoverished neighborhoods as a factor directly reducing well-being and hindering possible strategies for the escape from poverty.

83. Another source of self-assessment data is obtained from the subjective assessment



of households in the PPV. This data provides a unique view on the assessment of the poor regarding the quality and importance of different services and goods. The survey asks about the current value of nine different goods and services and about the desire to improve each of them. As Figure 13 and Figure 15 show, the services that are considered relatively good by the poorest include health, education, and public safety. The worst services are work, leisure, and clothing. In terms of the desire to improve, food, work, health, and education rank highest while leisure, public safety, and transport rank lowest.

84. Based on the priorities of the poor, the listed services can be aggregated in four groups (Figure 14). The first group includes services ranked high for their current value and for the importance of improvement. They include health, food, education, and housing. One interpretation is that for these basic services, adequate policies for their provision have been put in place and should be continued since the desire for improvement remains high. The second group includes only leisure, which is ranked as very low in its current value but also low in its priority for improvement. Here one could say that policies have appropriately paid little attention to this low priority item. The third group includes services that rank highly in their current value but whose improvement has lesser priority for the poor, including transportation, clothing, and public safety. Here, policies appear to have sufficiently provided the service compared to the other services analyzed. The fourth group includes only

work as an item that ranks as inadequate in its current value and high in its priority for improvement. Work is clearly the single item that has not been sufficiently provided by past policies.

85. There are some interesting findings on the differences in subjective assessment across income groups. As one would expect, the assessment of current value increases with income for all services. However, the current value of public safety in-

creases less with income than the current value of any other service. In relative terms, the wealthier class considers the current level of public safety to be lower than it actually is. Similarly, the desire to improve public safety increases the most with income, when compared to any other service. Above a level of approximately R\$150 per capita per month, the desire to improve services, aside from public safety and leisure, begins to decline with income, perhaps indicating some level of satiation.

3. Public Policies and Their Poverty Impact

86. This section analyzes the role of public policies in the areas of growth, labor markets, spending for health, education, urban services, and social safety net programs for poverty reduction.¹² This report focuses exclusively on the distributional aspects of these policies and does not attempt a comprehensive assessment of sectoral policies. Such assessment would obviously need to take into account objectives other than poverty reduction, which are not considered in this report. For each program area, the discussion covers, with differing levels of detail, a description of current policies and policy issues, their assessment as poverty reduction policies in the light of the economic principles established in Section 1 (efficiency, beneficiary choice, cost-effectiveness, and targeting), and discussion of possible improvements and reforms.

87. On most spending programs, the analysis includes an assessment of coverage and targeting. The coverage by consumption quintile shows the share of the population (or a subgroup of the population) in each quintile that receives a given service.¹³ The share of the uncovered poor population (defined for purpose of this analysis defined as the first quintile) that should receive a given service can be interpreted as the error of exclusion (poor people excluded from the program). Targeting is defined as the share of benefits that accrues to the first (poorest) quintile. The share of benefits to the other four quintiles can be interpreted as the error of inclusion (non-poor people included in the program).

88. Each program has particular characteristics that complicate the analysis of both cov-

erage and targeting. The extent to which these complications have or have not been appropriately addressed through the chosen methodology is briefly discussed in the context of each program. The methodology also has some limitations that apply across most programs. In particular, survey data typically covers the usage of rather than spending for or benefits from certain services. The methodology used assumes that the quality of the service received is the same for individuals from all quintiles (if conclusions are drawn in terms of benefit incidence), or that spending on beneficiaries from all quintiles is the same (if conclusions are drawn in terms of spending incidence). Often, these assumptions are violated in that poor people receive less valuable or less costly services. For example, the spending for and quality of schools and health care in poor areas is typically lower and water services to poor areas are often intermittent. This introduces a systematic bias in the estimates that follow. The incidence of service usage by the poor should therefore be interpreted as a lower bound on the regressivity, or upper bounds on the progressivity of spending.

89. Another limitation of the analysis is related to the nature of the PPV household survey. This survey covers only the Northeast and Southeast region of the country (including 73% of Brazil's population and 80% of Brazil's poor). Data only refers to these two regions. Due to the small sample size of the PPV, results for programs with very small participation rates (such as daycare and unemployment insurance) have very large confidence intervals, and incidence data for these programs should be treated with care.

90. Important policy changes have occurred after the date of the PPV survey, on which most of the incidence data is based, especially in the areas of health and education funding. This analysis obviously reflects none of the changes that have occurred after

¹² As explained in the introduction, programs directed at rural poverty reduction are not covered in this report.

¹³ Unless otherwise noted, consumption quintiles used in this analysis are based on the entire Northeast and Southeast region (coverage of the PPV) even where coverage or targeting is shown for a specific area or region alone. The focus on the first quintile (the poorest 20% of the population) implies the use of an extreme poverty line similar to the one used for the poverty profiles presented in Section 2.

1996-97, many of which are likely to have positively affected the more progressive distribution of program incidence. The PPV 1996/7 is used since, unfortunately, there is no more recent survey available that would permit the analysis of distributional incidence across a wide range of public services.

Growth and Macroeconomic Stability

91. This section reviews the linkages between economic growth and poverty reduction based on both international and Brazilian experience and offers possible scenarios of poverty reduction through growth in Brazil. This section goes on to discuss the relevance of growth policies for a poverty reduction strategy. This report includes discussion of: (a) the relative effectiveness of growth in reducing poverty compared to other policies; and (b) policies that increase the effectiveness of growth in reducing poverty.

Growth-Poverty Links: International and Brazilian Experience

92. The relationship between growth, poverty, and inequality is complex, but much has been learned from international experience that can be used as a reference for analysis in Brazil. The stylized facts from international experience include:

- (a) Assuming a constant level of inequality, there is no doubt that growth reduces poverty. China, Indonesia, Malaysia, and Thailand are all countries where exceptional reductions in poverty have been achieved over the last 20 years as the result of high and sustained economic growth. The total number of poor (earning less than US\$1 per day) in East Asia has fallen more than 50% from 716 million in 1975 to 345 million in 1995. High growth in Chile has reduced the number of poor from 1987 to 1994 by 40-60% depending on the poverty line used. There is no intrinsic trade-off between poverty reduction and growth; in fact there are important policies that are good for growth and poverty reduction, especially promoting labor-intensive growth, and investing in human capital.
- (b) There is no systematic effect of growth on inequality. The Kuznetz income-

inequality hypothesis (initially rising and later falling inequality as incomes rise) has been rejected with new data. In different countries, growth has been accompanied by rising or falling inequality. As a result, poverty reduction has been larger or smaller than would have been the case with constant income distribution. In Chile, inequality has remained constant and very high by international standards (Gini index of 0.56) over a period with high growth and large poverty reduction.

- (c) The negative effects of inequality include: (a) more poverty for a given average income level; (b) lower impact of growth on poverty reduction; (c) lower growth (based in particular on credit constraints for the poor that perpetuate a low and inequitable growth path); and (d) higher crime and lower health status.
- (d) Key factors that promote income inequality are: low educational attainments, asset inequality (in particular land), distortionary policies such as trade protection (biasing relative prices against labor and services which are a main source of employment for poor), and labor market rigidities that depress the wages of the poor in informal labor markets.

93. Brazilian data across states and over time confirm the relationship between growth and poverty reduction. State-level growth and poverty data clearly show the effect of economic activity and growth on poverty. Figure 16 shows each state, its income level and poverty rate for 1985 and 1996, and the near perfect relationship between the level of economic activity and poverty. Figure 17 shows growth and poverty reduction rates for each state over the same period. Six states experienced an increase in poverty despite low or moderate growth. One state experienced a slight stagnation in poverty with economic stagnation. The other states experienced poverty reduction coupled with economic growth.

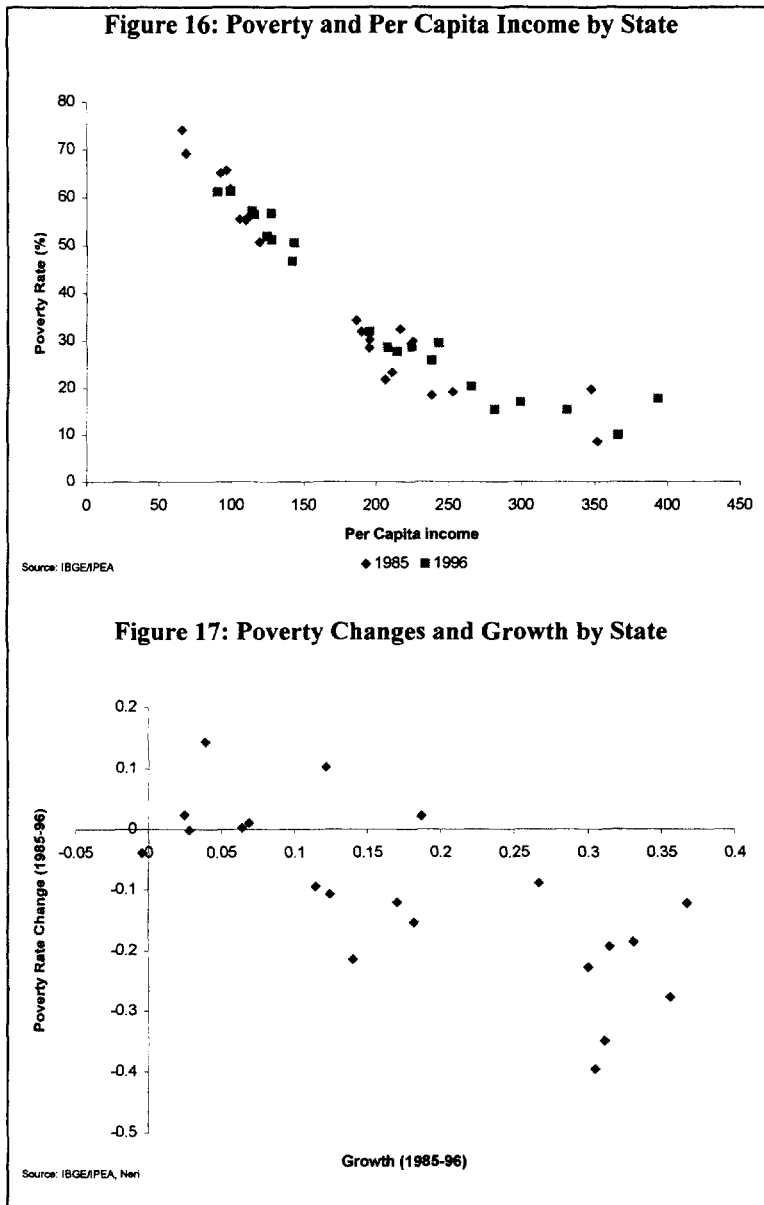
94. The quantitative relationship between economic growth (growth in per capita income) and poverty reduction can be conveniently expressed through the growth elasticity of poverty reduction (the percentage reduction in poverty rate over the percentage

in income distribution (and/or other variables) and can be obtained through well established procedures for the decomposition of poverty reduction into growth and distribution components. Even simpler, a conditional elasticity (under the assumption of a fixed income distribution) can be obtained by determining the elasticity of the income distribution curve at the poverty line.

95. Recent research on data from 42 countries has led to an estimate of unconditional growth elasticities for different poverty lines (Ravallion and Chen 1997). The elasticity for a poverty line of 50% of average per capita earnings (the R\$132 poverty line for this study is about 46% of average earnings) for all regions except Eastern Europe and Central Asia is -1.57. This means that for a 1% increase in per capita income, there is a 1.57% reduction in the poverty rate. The absolute value of this elasticity is higher for lower poverty rates and vice versa. This result is similar to the findings of other international studies. Elasticities for Latin American countries are typically smaller (Wodon 2000).

96. Here, three approaches are used to analyze the growth and poverty reduction relationship in Brazil:

(a) First, elasticities based on a fixed income distribution are calculated from the income distribution curve of the 1996 PNAD. The point elasticity of the income distribution curve is approximately -1.15 at the extreme poverty line (R\$65), and -0.80 at the R\$132 poverty line.



increase in per capita GDP). An unconditional elasticity does not control for changes in income distribution or other variables. It just reflects the effect of both growth and concurrent changes in income distribution. A conditional elasticity controls for changes

- (b) Second, unconditional elasticities are calculated from a data set of state-level poverty rates and GDP in 1985 and 1996. Using PNAD 1985 and 1996 country-level data, the unconditional elasticity at the higher poverty line is -0.58 using GDP and -0.85 using per capita earnings. At the extreme poverty line, the elasticities are -0.74 and -1.09 respectively. Thus, the elasticities observed over the 1985-96 period are somewhat lower than the point elasticities derived from the 1996 income distribution curve. This is compatible with the increase in income inequality that has been observed over the same period.
- (c) Third, the elasticities are controlled for variables of educational level and sectoral composition of growth. Pooling state-level data for the 1985-96 period, a simple regression yields an elasticity of -0.62 for the lower poverty line. Illiteracy rates, as an indicator of educational levels, have a positive coefficient but are not significant. Similarly, sectoral shares of the economy show a poverty reducing effect of manufacturing and a poverty increasing effect of services. Neither of these effects is statistically significant.

97. The main reason for Brazil's relatively low growth elasticities (Table 12) is the extremely high income inequality of Brazil. Growth elasticity is high when there are relatively few poor people but many of them close to the poverty line so that a small income increase can lift them out of poverty. In a country as unequal as Brazil, the opposite is the case. Holding unequal income distribution constant, a very small share of additional income from growth accrues to the poor.

98. In addition, the particular pattern of de-

velopment experienced in Brazil appears to have benefited the poor less on average than the non-poor. The actual (unconditional) elasticity is thus even lower than if a constant income distribution were assumed. While there has not been a clear distributional trend in Brazil, there have been distinct periods in which the poor have suffered more or gained more than the rest of the population. The poor made relative gains in the 1985-86 and the 1994-95 periods and lost in between, in particular in 1988 and 1993-94. An analysis of Brazil's patterns of growth and its distributional implications is recommended for the future.

99. Given the current income distribution, a very simplistic calculation can be made to compare the poverty impact of general investment in the Brazilian economy that produces distributionally-neutral growth with other policy measures. General investments in the economy are assumed to generate a real rate of return of 16% (medium-term market interest rates before the onset of the Asia and Russia crises). This means that each *Real* invested generates the equivalent of an increase in aggregate income of R\$0.16 annually in perpetuity. If this increase in aggregate income occurs proportionally to the current income distribution, 3% (or R\$0.0048 annually) will accrue to the poor for every *Real* invested (see Figure 18). Also, using a growth elasticity of poverty reduction of -1, it would require an increase in aggregate income of R\$20,600 (or an investment of R\$129,000) to bring one person permanently above the poverty line.

Policy Implications

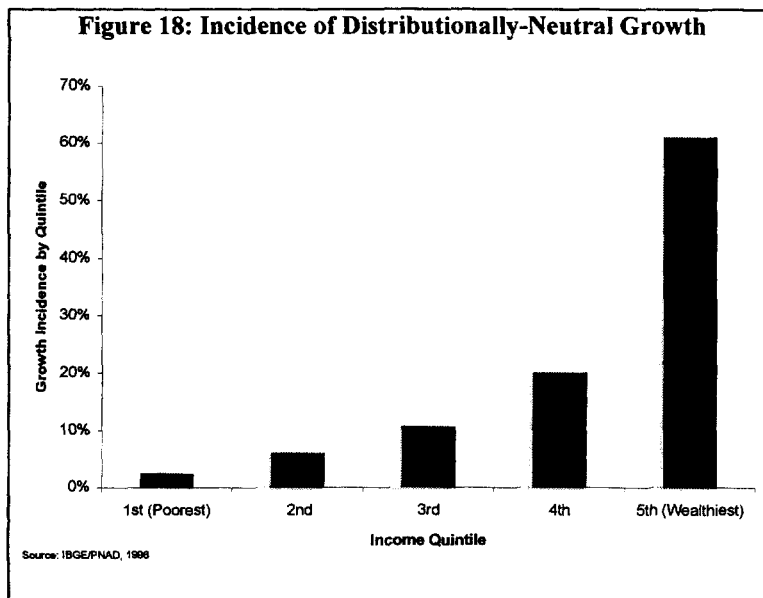
100. Growth has been the most effective policy for reducing poverty anywhere in the world. The very close relationship between poverty rates and average income across Brazilian states and over time confirms the

Table 12: Growth Elasticities of Poverty Reduction

Growth Elasticities	Extreme Poverty Line (R\$65)	Poverty Line (R\$132)
International (similar poverty lines, world, excluding CEE)	Not Available	-1.57
Latin America	-1.3	-0.94
Brazil 1996 profile with fixed distribution	-1.15	-0.80
Brazil actual 1985-96	-0.74/-1.09	-0.58/-0.85

importance of growth for poverty reduction in Brazil. Over a 20 year period, growth could nearly cut poverty in half, as it has in Chile and several Asian countries (see Figure 58 at the end of this report). If growth were distributionally more favorable than in the past, the poverty reduction gain could be even larger.

101. The *Real* plan has helped the poor through the end of inflation, the real appreciation of the domestic currency and the related shifts toward relatively more expensive non-tradables, and an increase in the minimum wage. Most of all, stability has created



the preconditions for sustainable growth. Judging from the past, any return to macroeconomic instability would harm the poor not only through a direct negative distributional effect but also through a reduction in growth prospects. This underlines the importance of fiscal adjustment and monetary stability for poverty reduction.

102. Fiscal adjustment is necessary to reduce the dependency of the Government on permanent large-scale deficit financing and thereby increase macroeconomic stability. Fiscal adjustment and the resulting reduction in demand for financing from the Government is also expected to lead to a declining

trend in interest rates. The declining cost of capital would be a major stimulus to private sector investment and growth. Declining interest rates will also reduce the cost of Government deficit financing, thereby breaking the vicious circle of high interest rates and high fiscal deficits as the result of the high cost of debt financing.

103. Given the linkages between fiscal adjustment, growth, and poverty reduction, it seems relevant to emphasize the ongoing fiscal adjustment effort as an essential prerequisite for more effective poverty reduction. Where fiscal adjustment affects social spending, the possible negative social effects need to be weighed against the long-term benefits of stability, growth, and subsequent poverty reduction resulting from fiscal adjustment.

104. The analysis of growth and poverty reduction reveals an apparent paradox. On the one hand, Brazil does not seem to require growth to end poverty. The small size of the aggregate income gap suggests that a relatively small amount of income redistribution would be sufficient to end extreme poverty. Also, only 3% of the wealth generated by growth would typically accrue to the poor.

Thus, from a narrowly arithmetic perspective growth seems to be ineffective at reducing poverty.

105. On the other hand, the cost of eliminating poverty through transfers may be much higher if the real life constraints of targeting and adverse incentives are taken into account. Also, the political viability of such a redistribution remains dubious. Moreover, the small share of growth that accrues to the poor makes a very big difference for the poor, given the relatively small size of the income gap, and can bring about a very large reduction in poverty over the

medium term. Also, growth will bring about a sustainable reduction in poverty that does not depend on continuing transfer payments. Growth creates economic opportunities and prospects for the poor beyond surpassing a poverty line. Moreover, growth generates additional benefits for millions of Brazilians who are above the poverty line but still urgently seeking improvements in their living conditions. In contrast to income transfers, growth makes the alleviation of poverty much more politically palatable.

106. Growth and directly targeted interventions have to be seen as complementary and not substituting policies. Growth will take time to reduce poverty and will not reach all the poor. However, growth can, over time, reduce the need for transfer payments, or allow them to be directed at relatively less impoverished populations.

107. Following the economic principles for poverty reduction policies, growth policies should be subject to rigorous economic analysis. Social objectives, in particular the generation of employment, should not be used to justify inefficient investments.

Employment and Labor Markets

108. Broad-based, labor-intensive growth is key for increasing labor demand and employment, and thus reducing poverty. The labor market is the mechanism by which growth gets translated through employment into poverty reduction. Therefore, the functioning of labor markets is critical for poverty reduction.¹⁴ This section discusses selective features of Brazil's labor markets, relates them to labor regulation issues, and then addresses active labor market programs of the Government. Unemployment insurance is discussed separately in the social protection section of this report. Given the focus of this report on poverty reduction policies and the distributional impact of public policies and spending, no attempt is made

to comprehensively assess labor market policies in the context of their broader objectives of economic and social development.

Labor Market Policy Issues

109. Excessive labor market regulation and policies that increase labor costs create rigidity and distortions in labor markets that can reduce overall levels of employment and thus contribute to poverty. Labor market regulation includes minimum wage legislation, mandatory benefits, limitations to contractual freedom, intervention by labor courts, and payroll taxes.

110. Relative to national wage levels, Brazil's legally mandated minimum salary is among the lowest in the world. According to a recent OECD statistic, Brazil has a minimum salary of about 25% of median salaries compared to most countries with a minimum salary of 40-70% of median salaries. As a result, Brazil's minimum salary is binding only in limited segments of the labor market in some regions (most notably the Northeast). The labor market distortion introduced by the minimum salary is likely small. Interestingly, recent studies have shown a very strong short-term correlation of poverty rates with changes in the minimum salary (Amadeo and Neri 1998). This effect is likely related to the fact that the minimum salary is still being used to index salaries both above and below the minimum salary. The annual adjustment of the minimum salary increases nominal wages back to their previous real level without producing negative employment effects. The resulting short-term fluctuation in poverty rates is correlated with the level of the minimum wage. Whether the minimum salary can effectively reduce poverty in the medium and long-term appears doubtful from international experience but would need to be assessed by an empirical evaluation of the wage versus the offsetting employment effect.

111. For formal employment, mandated benefits are equivalent to nearly 60% on top

¹⁴ Detailed analysis of issues related to labor markets and labor regulation is ongoing for a forthcoming World Bank report.

of base salaries. These benefits include a thirteenth salary at the end of the year, vacation pay, FGTS (severance fund) contributions, and social security contributions, among other benefits. Since the minimum salary is mostly non-binding, these mandatory benefits do not necessarily increase the cost of labor but limit flexibility of labor contracts. To the extent that the contracting parties desire a different structure of benefits, these mandated benefits have the effect of shifting, on the margin, employment to the informal sector.

112. Payroll taxes in a narrow sense are small (about 17% of salary). In addition, however, below-market returns to severance fund and social security contributions can imply additional effective taxation. While any level of taxation drives a wedge between benefits received by the employee and labor costs, and thus reduces the effective level of labor demand, payroll taxes in Brazil are not out of line with other countries and cannot be considered excessive.

113. Overall, the impact of uncertainty and rigid regulations seems more significant than the impact of (narrowly defined) payroll taxes. A complex and ambiguous system of labor laws and regulations and labor courts with far reaching powers limit flexibility in designing labor contracts and introduce significant uncertainties about the ultimate cost of an employment contract for the employer. Casual evidence suggests that these uncertainties are a significant hindrance to employment growth in Brazil. To put these distortions into perspective, however, it is important to note that a recent study on the rigidity of labor regimes in Latin American countries ranks Brazil as the third least rigid country in the region (Márquez and Pagés 1998). In international comparisons, Brazil appears as more rigid than the United States, United Kingdom, and France but less rigid than Germany, Italy, and Spain.

114. The consequences and symptoms of labor regulations, payroll taxes, and other labor market distortions in Brazil are: (a) the

existence of unemployment beyond a basic level of transitional unemployment; (b) labor market fragmentation, implying that employees with identical intrinsic qualities are paid differently by sector and region; and (c) discrimination implying that employees with identical intrinsic qualities are paid differently according to personal characteristics such as race or gender; and (d) the existence of a large informal sector.

115. Historically, open unemployment in Brazil has been low. However, recent significant increases in the unemployment rate have generated publicity and raised consciousness of the problem. Notwithstanding the recent increase, unemployment as measured in labor statistics is of limited importance as a determinant of poverty. First, overall unemployment numbers still small, and the unemployed comprise only a small share of the poor. Even though the poverty rate among people with an unemployed head of household is 46%, only 5.6% of the poor live in a household where the head is unemployed. Since the poor typically work outside of the formal sector, they do not receive unemployment insurance in the case of job-loss. This means the poor cannot afford to be unemployed. Instead, they seek other low-quality and low-paying occupations in the informal sector or opt for self-employment.

116. Unemployment is concentrated in individuals in the industrial sector, with medium levels of education (5 to 10 years of schooling), the young, and spouses and children of the heads of households (Barros and Camargo 1998). Unemployment therefore affects groups that are quite different from the groups at highest risk of poverty and often does not affect the main income earner of a household. Simulations by Paes de Barros et.al. show that even the elimination of unemployment in Brazil (assuming that every unemployed individual finds a job that pays as much as the average of jobs for workers with the same characteristics) could only reduce the poverty rate by one tenth. At the same time, however, short-term changes in poverty are often determined by

changes in unemployment. This is related to the fact that most unemployment is of relatively short duration, and many unemployed do temporarily fall below the poverty line during a period of higher unemployment.

117. Labor market fragmentation means that employees with identical personal characteristics get paid differently in different markets. Labor market regulation is one of the factors contributing to labor market fragmentation. Regulations reduce mobility and comparability between markets, and contribute to the emergence of informal markets. Measurement of fragmentation is greatly complicated by several unobservable factors of different jobs. However, illustrative wage simulations by Paes de Barros et. al. show the possibly significant poverty benefit of labor market integration in Brazil. These simulations suggest that if all workers received the average wage (across industries and regions) of workers with the same personal characteristics, poverty rates would be reduced by 20%. Most of the fragmentation, however, appears to occur between regions rather than between the formal and informal sectors.

118. Similar simulations show that the elimination of discrimination by gender or race would not lead to a significant poverty reduction. Note that this does not imply that there is no wage differentiation between different population groups. However, these wage differences are often explained by personal characteristics such as education and age rather than gender and race.

119. Informality is high, particularly among the poor. Informality appears in the poverty and employment profile as informal employment (employees without their employment card signed by the employer) and as self-employment (mostly individual, unregistered micro-businesses). These two categories constitute 40% of all heads of households and 58% of heads of poor households. While informality is clearly defined, its manifestations are gradual. For example, informal employees use the labor courts and often receive some of the legally

mandated benefits. While informal employees are clearly concentrated at the lower end of the quality scale of jobs, there is no indication that informality itself causes the low quality of these jobs. More likely, informal jobs are of lower quality because the current structure of formal employment contracts is less appropriate for the requirements of low-end jobs. Simply enforcing formality would not solve the underlying problems of low labor productivity, high costs, and the low perceived benefits of formality.

120. Informality is chosen when the costs of formality (the rigidity of mandated benefits, payroll taxes, and others) exceed the benefits of formality (unemployment insurance, pensions, other social programs, and social inclusion, including better career perspectives), or when the employer is informal (typically related to high overall taxation or rigid regulation). Informality fills the space between inactivity and formal employment, thus creating a cushion in case of formal sector employment loss or a path for social ascent. Fighting informality directly through enforcement would be counterproductive in most cases. It would likely make the poor worse off and eliminate their chosen solution for avoiding the high cost of formality.

121. While informality is a solution for many, it also reveals a problem (the high cost of formality) and has a cost (in particular social exclusion, less access to social insurance and government social programs, less access to credit, and, for the self-employed, less access to other markets). A strategy to deal with informality should be directed at addressing the underlying problems by reducing the cost of and thus increasing access to formality. At the same time, policies for those who prefer to remain informal should be directed at reducing the costs of informality. As a result, the distinction between an expanding but less regulated formal sector and a shrinking but less excluded informal sector would gradually diminish. Policies to address informality would include the following:

Table 13: Financial Structure of FAT, 1997

Inflows		Outflows		Assets	
PIS PASEP	R\$5.4 billion	Unemployment Insurance	R\$4.1 billion	BNDES Investments	R\$21 billion
Own Revenues (interest)	R\$2.7 billion	<i>Abono Salarial</i>	R\$0.6 billion	Official Banks (PROGER, etc.)	R\$5.4 billion
		Professional Qualification	R\$0.4 billion	Others	R\$8.6 billion
		Operations	R\$0.3 billion		
		Applications	R\$0.1 billion		
		BNDES Investments	R\$2.5 billion		
Total	R\$8.2 billion	Total	R\$8.2 billion	Total	R\$35 billion

- (a) Tax reform and simplification aimed at reducing the number of informal businesses. Informal businesses typically employ informally; thus, reducing the number of informal businesses should also reduce the number of informal employees.
- (b) Less rigid regulation with regard to mandated benefits and the structure of the employment relationship (structure of benefits, payments at dismissal, temporary contracts, etc.), permitting a larger range of choices to the contracting parties.
- (c) A closer tie between social insurance benefits (pensions and unemployment insurance) and contributions.
- (d) Selective access to social insurance mechanisms also for the informal sector.

122. The Government is increasingly focusing its policies on the issue of high informality. Active labor market policies such as qualification and labor market intermediation aim at employability in the formal sector. The modernization of labor regulation aims at reducing the perceived cost of formality. Stricter enforcement aims at increasing the perceived risks of informality. Finally, new credit programs for microenterprises are specifically directed at the informal sector.

123. It is important to recognize that the Government is making significant progress in the modernization of Brazil's labor regulation. Areas with recent progress include, among several others, options for profit

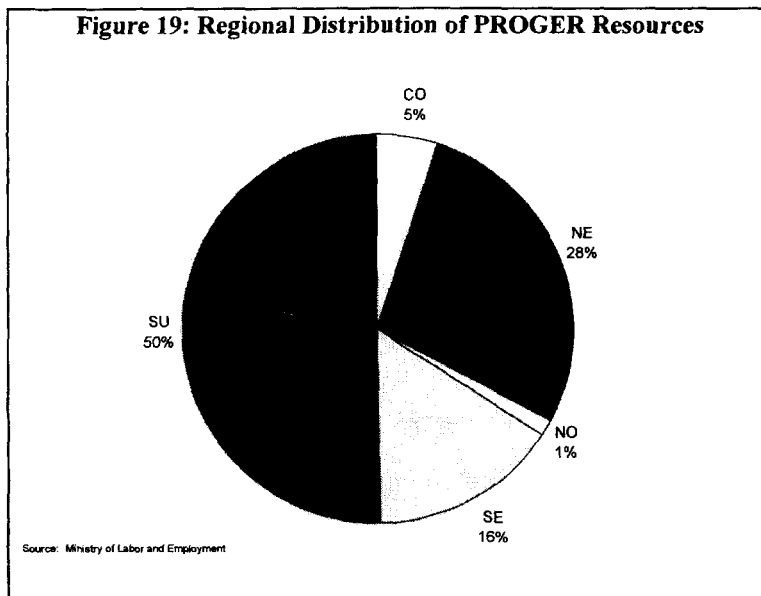
sharing by employees, introduction of part-time and fixed-term employment contracts, flexibilization within maximum work hours ("*Banco de Horas*"), and lay-offs with professional qualification. Given the importance of representation of employers and employees in the decision making processes regarding labor regulation reforms, such reforms are gradual in nature.

Government Labor Programs

124. The Government's main labor programs are financed by the *Fundo de Amparo ao Trabalhador (FAT)* which is funded from a corporate revenue tax (*PIS/PASEP*). 40% of PIS/PASEP revenues are passed on by FAT to BNDES at an administrative interest rate (TJLP) for BNDES' general credit programs under its own policies. The remaining funds are under the purview of a council (CODEFAT), which includes Government, union and employer representatives. The FAT funds are divided between current expenditures for unemployment insurance, *Abono Salarial*, and professional qualification (PLANFOR), on the one hand, and credit programs with the objective of employment generation (PROGER, PRONAF, etc.) administered by the official banks (BNDES, BB, BNB, CEF), on the other hand (see Table 13 on the financial structure of FAT).

125. Beyond unemployment insurance and *Abono Salarial* (discussed separately under social protection programs), a significant share of FAT resources is used for a large and ambitious professional training program, PLANFOR (R\$360 million in 1998). Training is not linked to formal employ-

ment, and is implemented in partnership with states, municipalities, and NGOs. PLANFOR is subject to several ongoing evaluation studies. It is likely to be much better targeted to the poor than training programs linked to formal employment and implemented by employer organizations (employer organizations are responsible for professional training programs financed out of a payroll tax at a cost of about one billion *Reais* annually). International experience suggests that active labor market programs, such as training, are not particularly efficient but can have important distributional benefits if they are well targeted.



126. Labor market intermediation can be cost-effective to improve the functioning of labor markets. However, intermediation programs, funded with R\$130 million in 1998, were often not working effectively and not reaching the intended target group. Reforms of the system of intermediation are underway. In particular, a recent effort to coordinate professional qualification, labor market intermediation and unemployment insurance under an integrated system go in the right direction.

127. Training programs should be well linked to both unemployment insurance and labor market intermediation.

128. FAT also provides the funds for credit programs to fund employment generation (PROGER, PRONAF, PROEMPREGO), amounting to R\$4.3 billion in 1997. These programs have a social objective that has not always been rigorously followed. Rigorous evaluation of the social impact of these programs and subsequent restructuring would be of great importance. On the positive side, the small average size of loans (about R\$10,000 in the urban programs) is indicating a focus on small enterprises, often run by or employing the poor. Also, the urban PROGER program has focused its resources on the impoverished Northeast. Of the R\$1.4 billion spent, 47% of resources were applied in the Northeast, 31% in the Southeast, and 18% in the South. On the negative side, the regional distribution of PROGER (urban and rural), shows substandard targeting. Of the R\$5.5 billion that were applied from January 1995 until August 1998, 50% was spent in the South, a region with 15% of the population and only 8% of the poor (Figure 19). Recent changes implemented in the administration of PROGER are expected to improve the performance of this program.

129. There are other initiatives at all levels of Government to support microenterprises. The high incidence of self-employment among the poor provides strong support for this policy focus. Well targeted and well designed credit programs (for informal microenterprises, for example) can be very effective as an anti-poverty device and are unlikely to demand very large sums of money. However, the effectiveness of intervention has so far not been proven. Therefore, a focus on experimentation and thorough evaluation of interventions is well justified.

130. Finally, a large number of programs of poorly-focused, directed credit and tax

incentives remain in place, many of them FAT funded and justified to some extent by their effect on employment generation and poverty reduction. It should be highlighted that international experience does not lend support for the use of such programs as poverty reduction instruments. Benefits are very unlikely to be well targeted, and their effectiveness on poverty reduction is likely to be far smaller than the effect of spending similar amounts on more targeted programs (discussed elsewhere in this report). Any such program should be subject to rigorous economic analysis. Bad investments should not be justified on the basis of poverty reduction objectives.

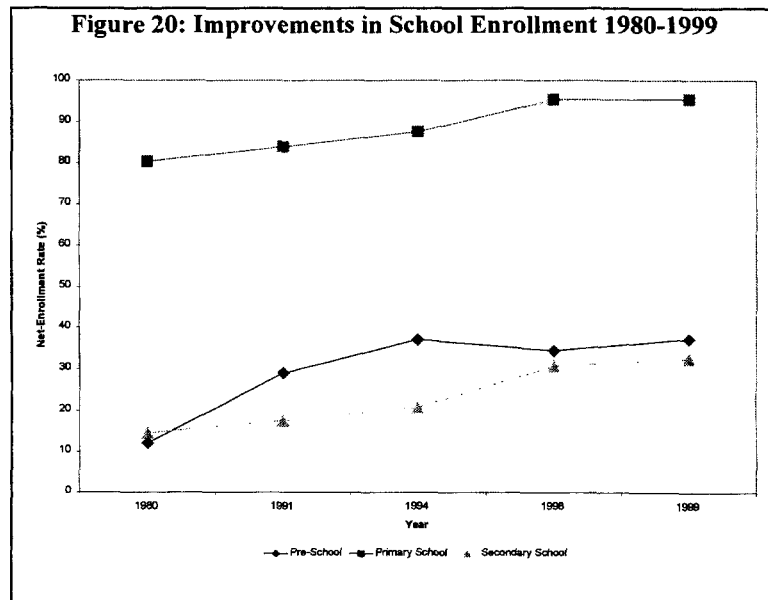
Education

131. Over the last few years, the Government has given major emphasis to improving education and has implemented major reforms in the education sector. As a result, Brazil has achieved impressive improvements in public education, including a massive expansion of basic, especially primary, education and a reduction in the regional differences of enrollment rates. Recent advances to improve educational quality through improved equality of spending on education have been significant. These education reforms constitute great progress in the right direction. Their strong positive impact on short-term educational indicators, such as enrollment rates and school attainment, is already visible (see Figure 20). More importantly, they will make an important contribution to poverty reduction with the lags inherent in any education sector reform.

132. While recent reforms are rapidly improving the educational outcomes for those currently in the education system, Brazil still suffers from the legacy of low educational outcomes among those poor who passed (or, worse, did not pass at all) through a neglected education system in previous decades. Despite all progress and brighter prospects for the future, low education levels thus remain the single most important obstacle to reducing poverty and inequality in Brazil in the short- to medium-term. In fact, educational inequality, rather than labor market segmentation or discrimination, explains most labor income inequality in Brazil.

133. Some of the most important policy reforms of recent years are mentioned in this section. However, a comprehensive discussion of these reforms is not intended in this report as broader aspects of educational re-

form are discussed in a series of Government documents (MEC 2000a, MEC 2000b) and Bank reports (World Bank 1997, World Bank 1999). The focus of this section is almost exclusively on the distributional coverage and targeting of spending at different levels of the education system. This section, thus, attempts to show who received, in 1996/7 when the PPV was fielded, the benefits of Brazil's public education spending, which amounted to R\$27.9 billion in 1995. In line with the improvements in many educational indicators shown by other more recent data sources, recent reforms will undoubtedly have changed some of the find-



ings reported here. However, the distributional implications of these reforms can only be assessed once another survey similar to the PPV is fielded in the future.

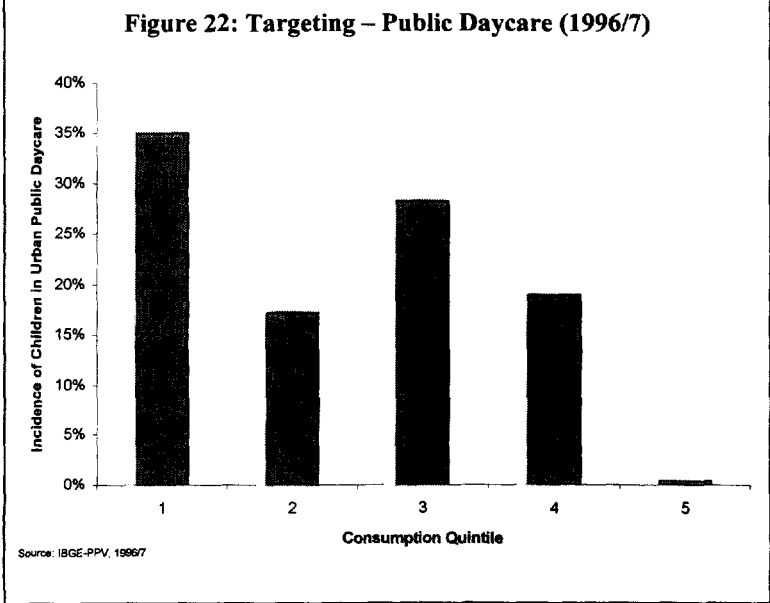
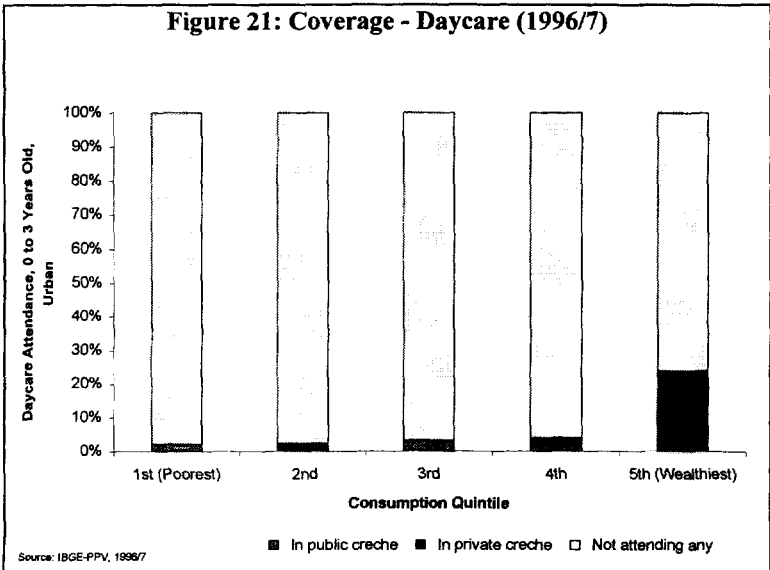
134. Brazil now invests 5.2% of its GDP in education (Government of Brazil 2000). With the enactment of the Basic Education Law in 1996, education sector responsibilities between federal, state, and municipal Governments have been made somewhat clearer, improving the assignment of responsibilities between government levels. The role of the Federal Government has increasingly become one of policy setting, redistribution, and complementation of ac-

tions at the state and municipal level. According to the provisions of the new 1996 Basic Education Law, Municipal governments are now alone responsible for pre-school education. State Governments are chiefly responsible for upper secondary edu-

taking on the responsibility for operating grades five through eight.

Day Care and Kindergarten

135. According to the 1996 Basic Education Law, pre-primary education is the responsibility of municipal governments although public daycare and pre-schools have been typically under the responsibility of both state and municipal governments. Figure 21 and Figure 22 are the first of a series of graphs showing coverage and targeting for a variety of Government programs. Figure 21 shows coverage with daycare centers (*creches*) by consumption quintile for public and private services. The first bar in this graph shows that 98% of 0-3 year old children from urban households that are part of the first (poorest) quintile of the national consumption distribution do not attend a daycare center. 2% of this group attend public daycare centers. Overall, coverage with daycare centers is very low and increases with consumption. Coverage reaches more than 5% only for the top quintile. Public services dominate for the first four quintiles but are negligible for the top quintile. Given the recognized importance of early childhood interventions and the currently low coverage, expansion in this area is an obvious priority.



cation. Primary education (first through eighth grades), however, continues to be a "shared responsibility" of both Municipal and State governments. In practice, States and Municipalities are signing agreements that transfer the responsibility to Municipalities for grades one through four, with States

136. Figure 24 shows the incidence of the usage of public daycare centers. Incidence over the five quintiles adds to 100%. 35% of urban children at public daycare centers come from households of the first (poorest) national consumption quintile. The inci-

dence of public daycare centers is progressive with significantly more than one-fifth of the children coming from the poorest fifth of the consumption distribution.

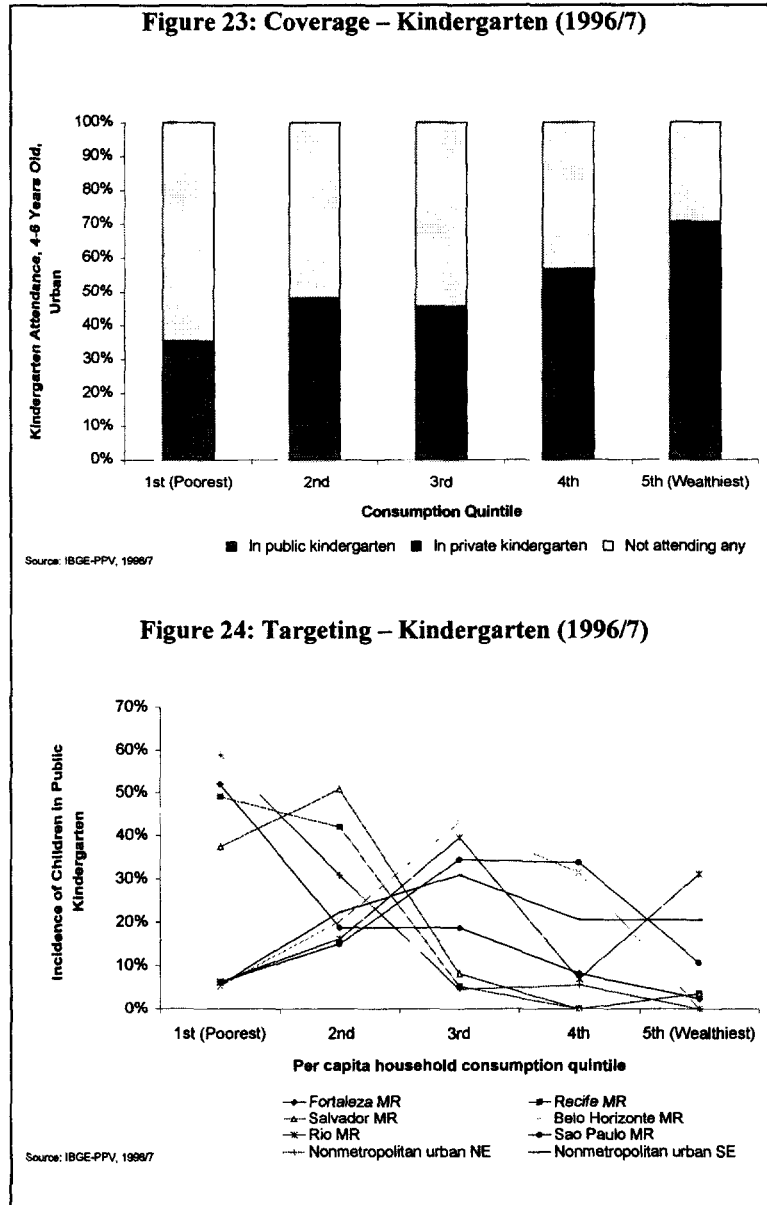
137. Urban kindergarten coverage at the age of 4-6 years extends from 35% in the first quintile to 70% in the top quintile (Figure 23). Public services cover a share of 21-32% of children in quintiles one to four, while private services increase with consumption from 4% in the lowest to 57% in the highest quintile. As a result of the higher share of children in the lower consumption quintiles, public kindergartens are progressive with 38% of the enrolled from the bottom quintile (Figure 24). Over time, net enrollment in the 4-6 year age group has risen from 12.1% in 1980 to 29.1% in 1991 and 37.2% in 1999. Yet, much scope remains for increasing coverage with public services for the lower consumption groups.

Primary Education

138. Policy reforms in primary education have been most profound. They address in particular the low quality of public schooling in poor areas, related to traditional spending inequalities, which have been identified as the main obstacle to the better educational performance of the poor. Implementation of primary education is mostly the responsibility of municipalities. Reforms have included the following:

- (a) FUNDEF was created through a constitutional amendment in 1996. It has completely changed the funding of pri-

mary education in Brazil. FUNDEF reallocates educational funding within each state in accordance with the number of students enrolled in state or municipal schools, and guarantees a minimum expenditures per student in each



jurisdiction. This reduces educational inequalities caused by earlier gross within-state differences in the funding and quality of education.

(b) The Government has carried out a massive public campaign to promote full enrollment of children in the 7-14 year age group. This effort was complemented by interventions in the supply of schooling places, and stimuli to increase

feeding programs (*merenda escolar*) and the *Programa de Garantia de Renda Mínima (Bolsa Escola)*. The overall effort has reduced the share of children in this age group that are out of school from 14.2% prior to 1995 to 4.0% in 1999.

Figure 25: Coverage – Primary Education (1996/7)

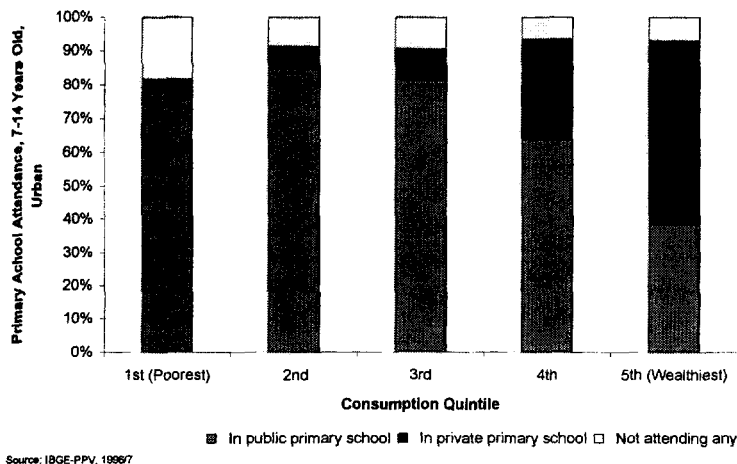
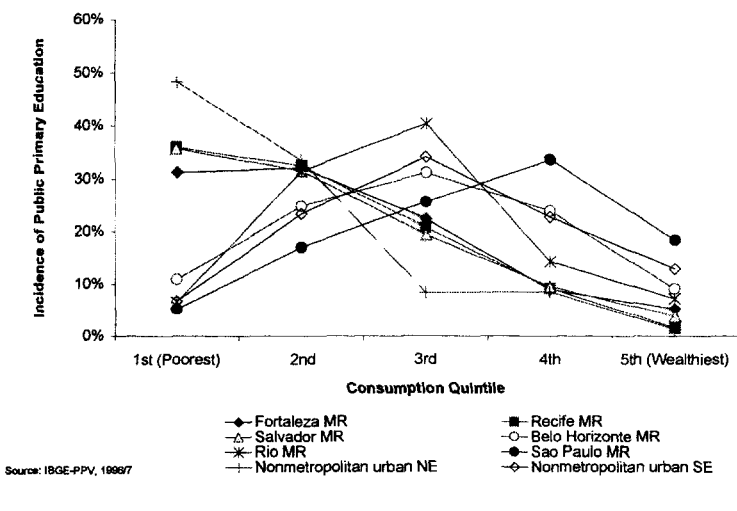


Figure 26: Targeting – Primary Education (1996/7)



(c) *Projeto Nordeste* and FUNDESCOLA constitute major federal initiatives to support the improvement of primary education in the poorer regions of the country, in particular the Northeast Region.

(d) Several major initiatives directed at improved educational quality include: the promotion of school autonomy, including direct funding to schools; school strategic planning initiatives in thousands of schools; accelerated learning classes targeted at failing students; curriculum reforms; improved teacher qualification; and a variety of standardized testing programs.

the demand for schooling. On the demand side, part of this effort is an expansion and decentralization of school

139. The massive efforts have yielded very impressive results. Over time, net enrollment in basic education has risen from 80.3% in 1980 to 83.8% in 1991 and 95.4% in 1999. The regional inequality in enrollment has fallen significantly. In 1980, net enrollment in the Northeast was 69.1% vis-à-vis 89.2% in the Southeast. In 1999, net enrollment in the Northeast had reached 92.8% vis-à-vis 97.6% in the Southeast.

Figure 27: Reasons for Non-Attendance of Primary Education, Urban Poor (1996/7)

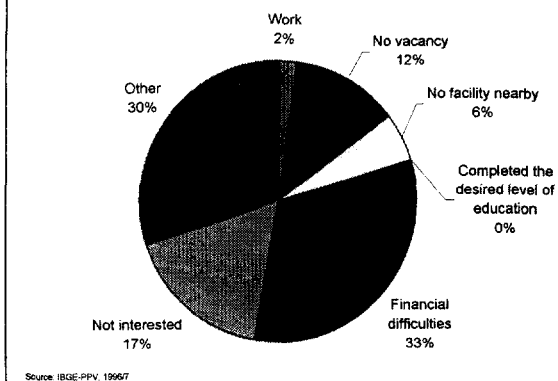
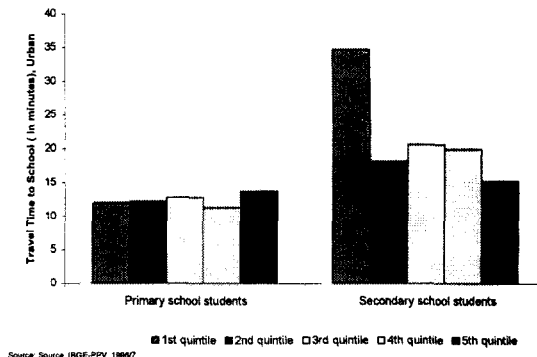


Figure 28: Travel Time to School (1996/7)



140. According to the PPV, primary school coverage (grade 1 to 8) among children age 7-14 in urban areas is 82% in the lowest quintile and reaches 93% in the top quintile (Figure 25). Private primary schools cover 4% of the poorest quintile and reach 55% of the top quintile. As a result of high private coverage for higher quintiles, public primary school services are progressive with 30% of enrollment from the bottom quintile (Figure 26). As discussed before, coverage rates have increased since the survey was taken as a result of a large public effort toward complete primary school enrollment. Increased coverage also has likely improved the incidence as those previously uncovered were mostly the poor. Nevertheless, scope for increasing primary school attendance, especially among the poor, remains. Of those poor who were not attending primary school, 18% indicate a clear supply-side reason (no school nearby or no vacancy), and 35% indicate demand-side reasons (work or financial difficulties) (see Figure 27). Following the analysis of earlier work (World Bank 1997), it is likely that answers of “not interested” and “others” are mostly related to the low perceived quality of schooling offered. Interestingly, very few respondents quoted “work” as a direct reason for non-attendance.

Upper Secondary Education

141. Secondary education is principally a responsibility of the states. A major expan-

sion of secondary education is underway supported by important policy reforms. Net enrollment has increased from 14.6% in 1980 to 17.6% in 1991 and 32.6% in 1999. large regional differences persist with net enrollment of 15.7% in the Northeast vis-à-vis 45.0% in the Southeast (1999).

142. PPV data also confirms that coverage at the secondary level (grade 9-12) of children ages 15-19 drops drastically compared to primary school coverage. Secondary school coverage is only 6% for the bottom quintile and reaches 53% for the top quintile. Most services in the first three quintiles are public. Private services dominate for the top quintile. The incidence is highly concentrated in the third and fourth quintile. Among the urban population, the first quintile receives only 8% of the public services.

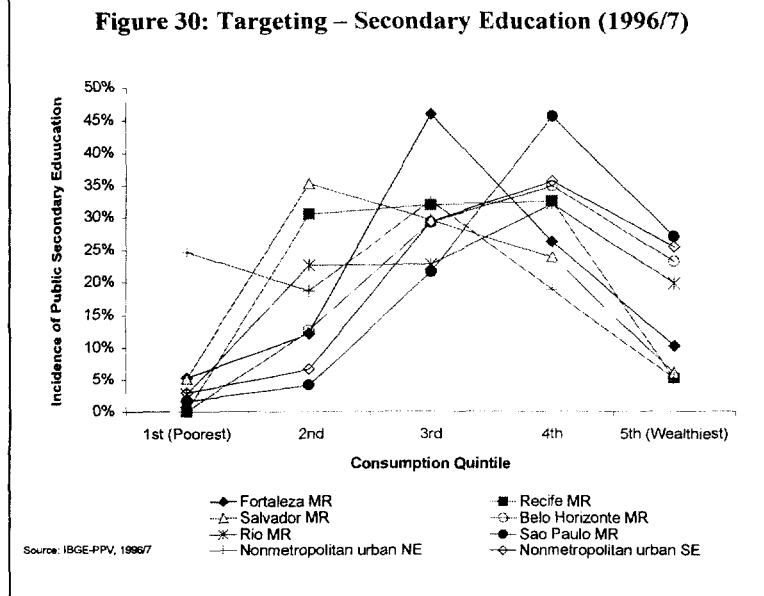
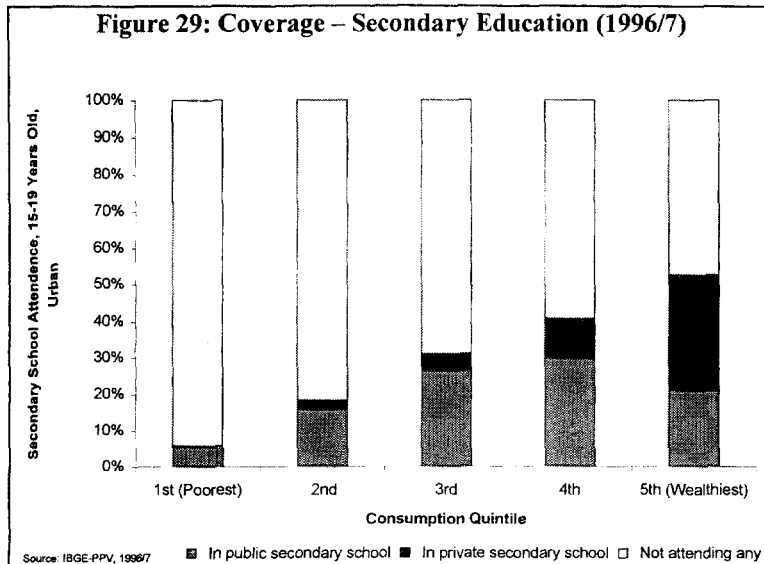
143. The low coverage and targeting rates of secondary education are directly linked to low completion rates in primary education in the past. Especially students from poorer households typically did not complete primary education and thus never even considered entering secondary education. With the great advances in primary education, this is likely to change over the next years. The expansion of secondary education will continue and should also encompass the poorest groups of society.

144. Another, probably less critical, issue is access to secondary schools. Long travel

times for the poorest quintile indicate potential access difficulties. While primary schools are located at an average travel distance of about 12 minutes for urban populations of all consumption quintiles, secondary schools are located at a travel distance of 35

Higher Education

145. Most federal (as opposed to consolidated) education spending is for the higher education sector. In 1998, 2.1 million students were enrolled in higher education, 28% more than in 1994. Consistent with the finding that the poor rarely complete primary, let alone secondary, education, PPV data shows that higher education attendance among the 20-24 age group is negligible for the first three quintiles. In fact, the PPV sample does not include a single student of higher education from the first quintile. Among the 20-24 year old, coverage is 6% in the fourth and 42% in the fifth quintile. The incidence of the service is extremely regressive with 20% of the services provided to the fourth and 73% to the fifth quintile.



minutes for the poorest compared to about 17 minutes for the rest of the population (see Figure 28).

Adult Education

146. Given the legacy of poor education system performance in the past, adult education is an important part of the educational reform agenda. Education programs for adults include, on the one hand, basic education, including an ambitious program to increase adult literacy (*Alfabetização Solidaria*), and on the other hand, professional qualification and training programs, such as PLANFOR as well as more traditional technical training

programs provided by semi-autonomous industry organizations. Given the low frequency of adult education in the PPV sample, results on distributional incidence should be viewed with caution. The analysis shows only 5% incidence in the bottom

quintile and a concentration of incidence in the third to fifth quintiles.

Summary and Implications

147. Brazil has made major strides in the education sector, has implemented ambitious reforms, and has in several areas closed the education gap to other countries at the same income level. At the same time, the legacy of past neglect means that education indicators for the population as a whole will improve only gradually. Continuous efforts will have to be made to consolidate recent reforms and advance even further in the improvement of overall education indicators.

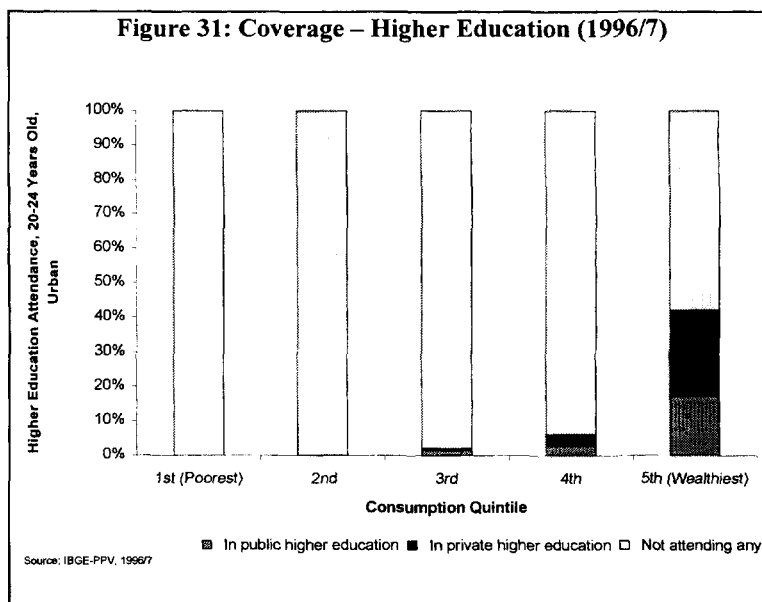
148. World Bank studies and project economic evaluations show that educational investments have good economic returns (World Bank 1997). Even in the past, rates of return to each additional year of schooling in (often low quality) public schools were 20% and higher. The returns to improving the quality of schooling and the returns to attending higher-quality schools are likely to be significantly higher. This means education investments are efficient investments that contribute not only to poverty reduction but also to growth.

149. Given that the education indicators of the poor are still low, continued efforts to further improve educational outcomes have to be at the core of any medium to long-term strategy to increase the ability of the poor to take advantage of economic opportunities and reduce poverty in Brazil. School attendance and school attainment of the poor can be further advanced through a combination of supply and demand side interventions. Major supply side reforms directed at improved quality of schooling are underway, as described before. Higher quality of

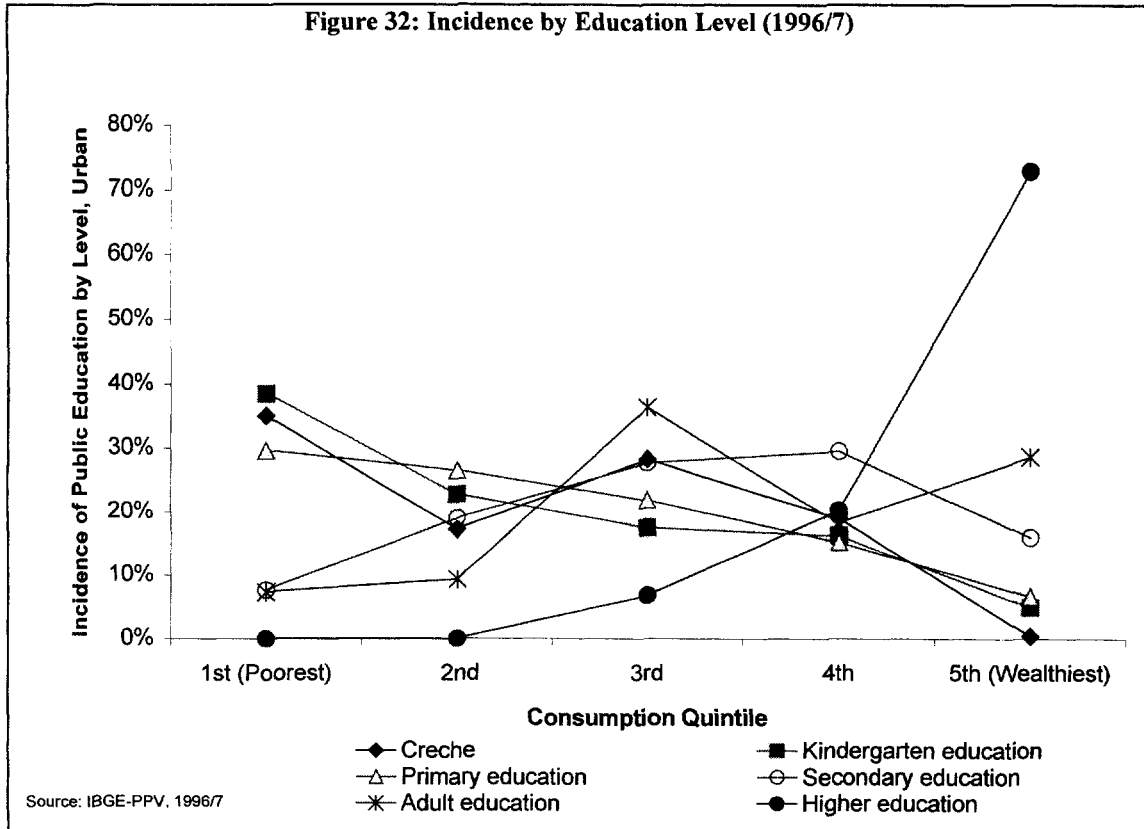
schooling raises the benefits of education to students and, thus, also their demand for schooling. Direct demand side interventions include transfer payments linked to school attendance, such as those supported by the rapidly expanding *Programa de Garantia de Renda Mínima* ("Bolsa Escola"). They can be justified by inefficiently low demand for education among the poor as a result of externalities and credit market failures. Rigorous evaluation results with respect to the educational impact of these programs, however, are still lacking.

150. Figure 32 summarizes the distributional incidence of public education for different education levels in urban areas. The figure highlights the progressive nature of basic education (daycare, kindergarten, and primary education), the concentration of secondary (and possibly adult) education in the third quintile and above, and the regressive nature of spending on higher education.

Figure 31: Coverage – Higher Education (1996/7)



151. In those parts of the education sector that have high targeting ratios, provision of free schooling constitutes a cost-effective transfer of resources to the poor (due to the high returns on investment). The fact that education is unalienable means that subsidies implicit in free provision of education



can be better targeted than those implicit in physical goods, transfers, and services (urban services, transfer payments, and credit in particular). The only limitation is that most forms of education have only medium to long term returns; they are thus less suitable for immediate short-term poverty reduction.

(*FIES*) was launched with funding of R\$150 million.

152. Improved targeting is possible both by reallocation of expenditures between education levels as well as targeted investments for pre-primary, primary, and secondary schooling in poor areas. Governments at all levels increasingly follow this strategy of increased investments in education in poor areas. Especially for higher education, the targeting of public spending could be increased by introducing cost recovery mechanisms in parallel with bursary programs that would provide opportunities to the poor to benefit from higher education. Interestingly, the Federal Government is proceeding toward such programs to enable students to attend universities. In 1999, the *Programa de Financiamento Estudantil*

Health Care

153. In 1995, Brazil's public sector spent roughly R\$21.7 billion (3.4% of GDP) on health care, accounting for 16% of all social spending. The current structure of Brazil's public health system has its roots in the Constitution of 1988, and the basic implementing legislation for the health sector approved in 1990. Known as the *Sistema Único de Saúde* (SUS), the Brazilian health system has several features that make it unique in Latin America:

- (a) First, it is the only Latin American system with a substantial separation of finance and provision, the former being largely public while the latter is to a significant extent private (both non-profit and for-profit providers).
- (b) Second, Brazil is the only country in Latin America to have completely eliminated the traditional distinction between the Ministry of Health and the Social Security System. Coverage under one public system is legally universal, and public money can be used to finance any type of provider.
- (c) Most financing comes from the federal level but public provision is almost entirely a municipal responsibility. Both state and federal governments are responsible for the technical and financial support that municipalities need to assure this provision. Thus, a large share of funding occurs as inter-governmental transfers, either directly to a state or municipal government or as purchases of services provided by those governments' public facilities.

154. Important recent reforms of the public health care system have increased the emphasis on basic health and improved the equity of health care access and funding. These reforms build on two major reforms that took place in the early 90s. First, the creation of the Unified Health System (*Sistema Único de Saúde* – SUS), which unified financing and service provision of both So-

cial Security and MOH, ended the existence of two separate systems: one for salaried workers that paid contributions, and the other one for the poor. Second, the decentralization of health services, which transferred to the municipal level the authority and resources for managing local health systems and service provision. Presently, two stages of decentralization are granted, depending on the municipality's ability to manage the system (as codified by NOB96): Full Management of Basic Care (*Gestão Plena da Atenção Básica*) and Full Management of the Municipal Health System (*Gestão Plena do Sistema Municipal*). The first entitles municipalities to receive block grants for primary care (See PAB below). The second also allows the transfer of block grants for primary, secondary and tertiary care. By the end of 2000, 99% of municipalities in Brazil had been granted at least management of basic care (10% of municipalities are managing all levels of care).

155. In the area of health care financing, a 1998 reform replaced fee-for-service reimbursements for basic interventions (which favors the wealthier parts of the country where past investment creates the capacity to provide services and thus receive reimbursement) by a system of per-capita transfers for primary care (PAB -- *Piso Assistencial Básico*). PAB finances basic health care at a level that equaled R\$10 to R\$18 per-capita in 1998. The amount capitated is augmented to municipalities that adopt the model of primary care promoted by the government (See PSF below) and implement nutrition, epidemiological surveillance, and basic medication programs. As a result of this policy, financing inequalities between different states have fallen dramatically in recent years (Primary care per capita difference between the highest and lowest state felt from 133% in 1996 to 25% in 1999). In addition, more public funding has gone to financing primary care (Today, 23% of service expenses are in primary care).

156. More recently, and after years of debate and consensus-building, Congress approved Constitutional Amendment 29 (EC

Box 1: Community Health Agent Programs

One of the important recent innovations in the health care sector has been the creation of the Family Health Program (PSF), which was based on an earlier pilot program undertaken Ceará. The PSF aims to provide health care to even the poorest and most remote communities. In the PSF, family health teams consisting of a doctor, a nurse, a nurse auxiliary, and 4 to 6 community health agents, provide basic care to a defined set of 1,000 to 1,200 families, offering not only medical care but also instruction in disease prevention and behavior change.

The community health agents, in particular, play an integral part of the PSF teams. These agents are selected among residents of the community to be assisted and undergo basic training in health care procedures before attempting to provide medical care. Community health agents are directed to register all families in their area, and have the responsibility of visiting each family at least once each month. In their visits, community health agents weigh and measure all children under two years of age, verify vaccinations, identify children of school-going age who are not attending school, teach families how to prevent diarrhea and use oral rehydration, promote breastfeeding, identify pregnant women and encourage them to seek prenatal care, and offer information about family planning and sexually transmitted diseases (including AIDS). When health agents identify cases requiring more rigorous medical attention, they refer to the doctor or nurse of their PSF team.

Clearly, the program has proven effective in covering a large share of the Brazilian population. In December of 1999, there were 4,954 PSF teams working in 1,870 municipalities in each of Brazil's 27 states. Assuming a coverage rate of 3,450 people per team, the PSF program provided care to 17.1 million people (approximately 10.4% of Brazil's population). An additional 87,000 community health agents (not working as members of PSF teams) provided health outreach services to an additional 47 million Brazilians (approximately 28% of the Brazilian population). As the PSF program expands, these community health agents will be integrated into PSF teams. Employment of health agents as non-specialized personnel has allowed for high coverage at low cost. However, low schooling and lack of specific knowledge can inhibit agents from providing correct advice and adequately performing simple procedures in their family visits. Further training and supervision could resolve these shortcomings.

While information is still preliminary, evidence suggests that PSF may have already exerted a positive impact. Mean infant mortality rates fell 13% from 1995 to 1998 in the 33 municipalities in Pernambuco that had PSF but rose nearly 17% in the 98 municipalities that did not have PSF. In other areas of analysis, the results were more ambiguous. The PSF program is associated with higher average hospital mortality rates for children under five, particularly in the Northeast. This association could be the result of the PSF's success in locating more ill children and getting them to hospitals when they would otherwise have died at home. Overall, the PSF program still requires further rigorous evaluation both in terms of its effectiveness and in its ability to target the poorest municipalities.

Source: Gauri (2000, p. 44-45, 72-75).

29) in September 2000 mandating an increase in the funding levels for the health sector by the Federal Government (linking growth in health sector financing to GDP growth) and earmarking 12% of state revenues and 15% of municipal revenues to the health sector. This constitutional reform followed an earlier example set by the education sector.

157. In the area of service provision, the Family Health Program (Programa de Saude da Familia, PSF, see Box 1) was launched in 1994 building on the strengths of its 1991 predecessor, the PAC (Programa de Agente Comunitario). PSF was conceived with the objective of reforming Brazil's curative and hospital-centered health care system. The program aims at restructuring health care by

developing a primary care network that would be proactive in serving vulnerable populations and would increasingly serve as an entry point to higher level services. PSF organized community agents into teams, which typically include a generalist or family health physician, a nurse, one or two auxiliary nurses and more recently also a part-time dentist. Each team provide care to a defined set of 600-1,000 families with use of standardized protocols. Where implemented, the program has been associated with: i) Increased coverage of basic care in small size municipalities with high infant mortality rates; ii) High satisfaction with the program by users; iii) Significant positive impact on registered infant mortality rates, vaccination coverage, childhood nutrition, and hospitalization rates – the success of

community agents in reducing the mortality from diarrhea in the Northeast should be particularly noted; and iv) Increased production of basic services. By the end of 2000, about 25% of the population had been covered by the program. The GOB expects to cover 50% of the population by the end of the year 2002.

158. In 2001, the MOH drafted regulation (NOAS 2001) to strengthen the incentives for a continued expansion of PSF originally provided by NOB96 and to require that municipalities that wish to become more autonomous in the management of all levels of health care emphasize PSF as a gateway to rationalize the use of higher levels of service. NOAS 2001 also requires that states develop "Regionalization Plans" that would provide incentives to attract small municipalities to accept participating in larger clusters which would provide the minimum market size required for an efficient operation of secondary and tertiary care facilities. A significant number of municipalities have already implemented systems of effective management of care based on the use of Centros de Regulacao which centralize all appointments for specialized services (except emergencies), allow effective planning of contracted services, give priority to patients referred by PSF teams, and establish a foundation for electronic authorizations, billing, payments and even audits of "medical need".

159. In the area of health regulation, after decades of unregulated growth, the government has recently passed legislation and created the Agencia Nacional de Saude Suplementar – ANS (1999) to regulate the buoyant private health insurance industry. The objectives of the regulators are to reduce

SUS subsidies to private insurers and impede abuses of insurers on beneficiaries. The elimination of SUS subsidies to private insurers will be facilitated by the introduction of the Cartao SUS, which is an individual computerized card for identification of SUS beneficiaries. Legislation for the creation of the National Health Surveillance Agency (Agencia Nacional de Vigilancia Sanitaria – ANVS), was passed in early 1999. The agency oversees pharmaceuticals, as well as medical equipment, cosmetics, and hospital services. It also has responsibility for authorizing products on the market (Registro Sanitario), as well as the licensing of manufacturers (Licenca de Funcionamento). The agency is responsible for overseeing and estimated US\$120 billion worth of services and products, or about 15% of the GDP.

160. In recent years, the Brazilian HIV/AIDS program has reached worldwide recognition for its achievement in preventing and treating HIV/AIDS. HIV/AIDS was early perceived as a development and societal issue rather than a health issue, and it has had full government support. The government/civil society partnership is remarkable, and an example to the rest of the world. The challenge for the future (when the Bank project will be closed - just for your information, I am not sure this should be mentioned) will be the financing and quality control of the NGOS projects, as well as the decentralization of the HIV/AIDS program to the states and municipalities, keeping the same pace and quality of the interventions, as it is now. Brazil is one of the few countries in the world that provide antiviral drugs free of charge to all ill patients.

161. Brazil has been progressively given

Table 14: Infant Mortality

	1980	1985	1990	1997
Brazil	85.64	66.59	47.81	36.70
North	83.61	63.30	44.59	35.60
Northeast	120.46	95.27	74.30	59.05
Southeast	64.44	47.96	33.57	25.23
South	57.70	41.18	27.36	22.55
Centerwest	66.44	44.15	31.19	25.39

Source: Simões (1997).

attention to public health issues, especially on epidemiological and environmental surveillance and in developing institution building for disease surveillance and endemic disease control. The "portaria No 1.399 of December 15, 1999 defines the role and responsibilities of the three levels of the health system regarding health surveillance and disease control, and establish the financing mechanism for transference of federal funds into states and municipalities for epidemiology and disease control activities. This "portaria" contributes to: increase the investment at state and municipal on global public goods; develop a rationale for resources allocation, based among other factors on outcomes; create an integrated plan for the development of the public health surveillance and monitoring system.

162. There is no doubt that the Government's efforts to provide more effective basic health care have been successful. Table 14, for example, provides evidence of the great reduction of infant mortality in Brazil over the last two decades. With the implementation of further reforms to strengthen basic health care delivery, especially to the poor who cannot afford private care, the positive trend in health indicators is likely to continue.

Coverage and Targeting of Health Services

163. Data of health facility usage from the PPV show that the poor almost exclusively rely on public health care. As one would expect, use of private hospitals and clinics is highest in the top quintile, and, overall, there is significant participation of private health

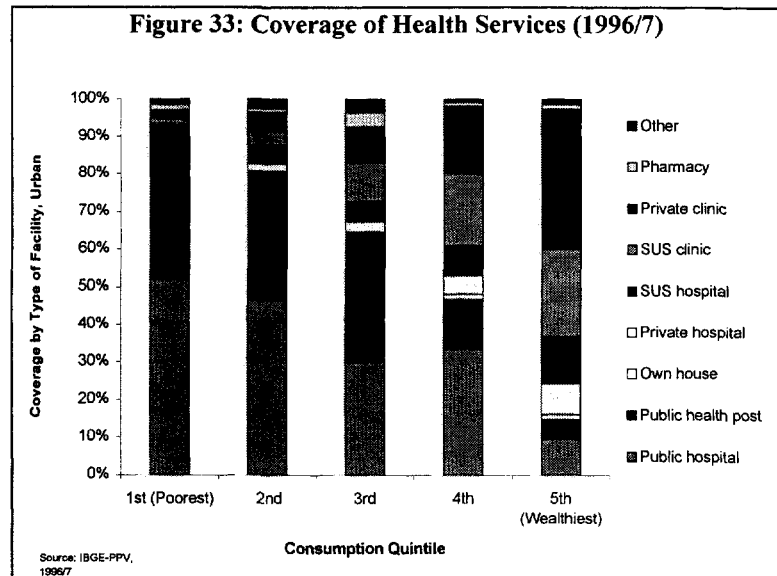
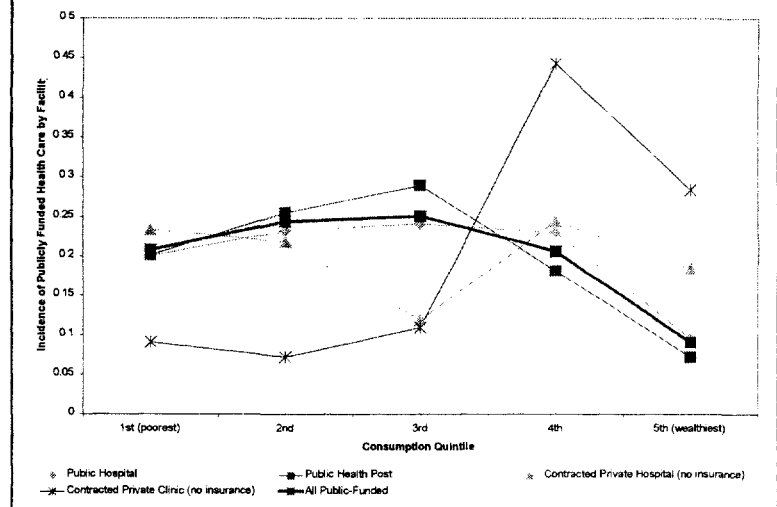


Figure 34: Incidence of Health Facility Usage (1996/7)



care in the higher quintiles (Figure 33). The finding that the poor essentially do not use, or cannot afford, private health cannot be overemphasized. This finding taken together with the importance of health care to maintain human capital and to protect from negative income shocks implies great importance of a well-functioning public health care system for the well-being of the poor regardless of the targeting of public health care.

164. The incidence of health spending based on the analysis of the PPV data needs to be treated with great caution. Clearly, medical services and their costs differ

greatly by facility, and probably also by consumption level of the patient. Ignoring these complications, overall usage of publicly funded health care is slightly above the population share for each of the first four quintiles and about half of the population share for the top quintile. This incidence is the result of two factors: (a) the increasing use of health services, overall, with income; and (b) the increasing share of private health care with increasing income. Overall, use of publicly-funded health care is, thus, not biased against the poor. Given the high income elasticity of health service demand (health service demand typically rises more than proportional with income), this is an encouraging finding.

165. Figure 34 shows the incidence of publicly-funded health care by type of facility in 1996/7—before most of the recent health sector reforms took effect. Public hospitals and health posts are little used by the top quintile, and usage share by the poor exceeds their share of the population. The incidence of services provided at publicly-funded private facility is complicated by the fact that the PPV questionnaire uses the terms *hospitais conveniados* and *clínicas conveniados*. While the guide to the questionnaire explains that these terms refer to *convênios* with the public health system, these categories may have been misunderstood by some respondents as referring to clinics and hospitals paid by private health insurance. To eliminate this possible error, the analysis reflected in Figure 34 eliminates all those users of contracted clinics and hospitals that have private health insurance.¹⁵ The results reported are thus likely underestimating the use of publicly-funded private clinics and hospitals by high-income users (since respondents with private health insur-

ance also may have used publicly-funded private facilities).

166. Despite the likely underestimation of high-income users, usage of publicly-funded private clinics is concentrated in the top two quintiles and low among the bottom quintiles. This finding, and the possibility that regressivity may be significantly higher than estimated,¹⁶ suggest that further analysis into the incidence of usage of these publicly-funded private facilities should be undertaken. If further analysis confirms these findings, policy options should be assessed to either significantly improve the social targeting and eliminate de-facto access barriers for the poor in this spending category or to change the arrangements for public funding of these facilities. The Government is moving in this direction through a pilot initiative to charge private insurers for SUS services provided to their clients. Control over who benefits from publicly financed health care will also be facilitated by the pilot-introduction of a SUS identity card.

167. The PPV also provides information on several specific types of medical treatments of particular relevance for the poor. Subsidies to prenatal care are better targeted to the poor than health care overall. Roughly 46% of patients receiving prenatal care in public health facilities are from the bottom two quintiles. As in the case of health care in the aggregate, the share of poor in the client population varies by type of facility. Nearly 66% of prenatal visits to public health posts and centers are from women of the bottom two quintiles. Public health facilities are critical to the poor's access to prenatal care. In urban areas, nearly 95% of poor women's prenatal care is delivered through the public hospital and health post system. The non-poor are much less dependent on the public system, as they obtain around 33% of their prenatal care in private (non-SUS) clinics. Only the richest

¹⁵ Piola and Nunes (2000) have undertaken similar analysis of the incidence of health spending. In addition to some other methodological differences, they have excluded all *hospitais conveniados* and *clínicas conveniados* from the publicly funded facilities. As a result, they find slightly more progressive overall public health spending with 22.9%, 23.5%, 22.5%, 18.7%, and 12.5% of federal public health spending accruing to the first through fifth income quintile, respectively.

¹⁶ If those who hold private health insurance are not excluded from the analysis, the incidence of contracted clinics is 2.1%, 2.7%, 10.3%, 21.7%, and 53.2%, and for contracted hospitals 8.3%, 8.6%, 9.0%, 28.6%, and 45.3%, respectively for the first through fifth quintiles.

20% of women getting prenatal care are more likely to go to a private clinic than one of the publicly-funded facilities.

Urban Management, Services, Housing, and Land Use

168. Basic urban services and housing have large importance for the welfare of the poor. In fact, lack of basic infrastructure and adequate housing is a significant manifestation of urban poverty throughout the country. Urban services include, at one extreme, goods that are mostly private (but often regulated) such as land and housing, and at the other extreme, goods that are mostly public such as street cleaning, paving, police protection, lighting, and drainage. This section discusses issues pertaining

to the overall management of urban services, including land and housing. An overview of issues is followed by the description and evaluation of current policies and programs and proposals toward reforms. Separate sections address the specific issues related to water, sanitation, and urban transport. These services provide private goods but are heavily regulated or supplied by the public sector due to high fixed costs that typically do not allow effective competition between multiple suppliers present in the same market.

Background and Policy Issues

169. Location of the Poor. The urban poor are concentrated in two types of informal residential areas, often without official recognition of land titles, and in different types of rented spaces. The first type is the *favelas*, formed through a process of illegal land occupation. Most *favelas* are located on public land in the inner urban areas and have a long history of settlements. Some *favelas* are located in hazardous areas such as steep hills (in Rio de Janeiro, for example) or floodplains (in Belem's *baixadas*). Almost all *favela*

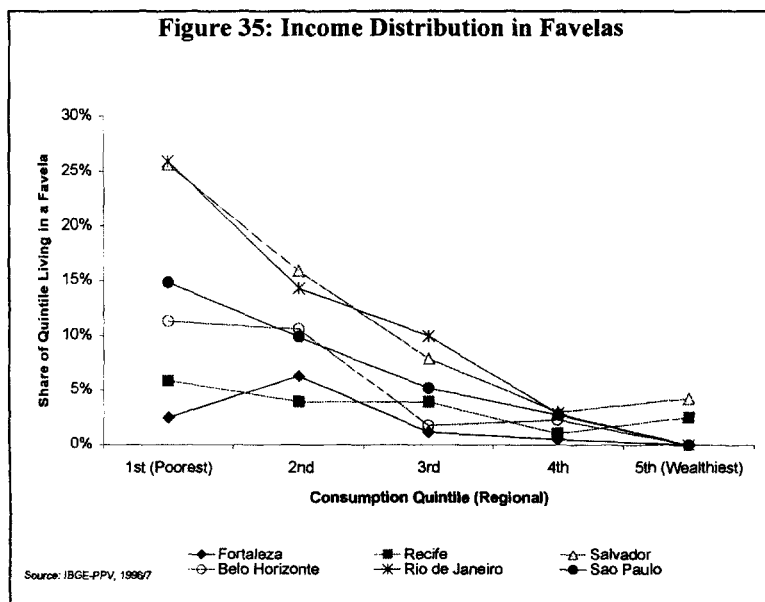


Table 15: Number of Favela Homes in Brazilian City, 1990

City	Number of Homes (in thousands)	Number of Favela Homes (in thousands)	Favela as % of total Homes
São Paulo	3,668	213	5.8
Rio de Janeiro	2,409	236	9.8
Belo Horizonte	517	52	10
Salvador	470	17	3.7
Brasília	422	0	0.1
Porto Alegre	386	25	6.5
Fortaleza	384	51	13.3
Curitiba	328	22	6.7
Recife	311	131	42.2
Belem	257	39	15.1
Goiania	251	4	1.6
Campinas	221	39	15.1
Manaus	218	10	4.7
Santos	159	11	7.1
São Luis	151	6	3.9
All above 15 cities	10,152	1,005	9.9

Source: Adapted from Gilbert (1996, Table 4.8).

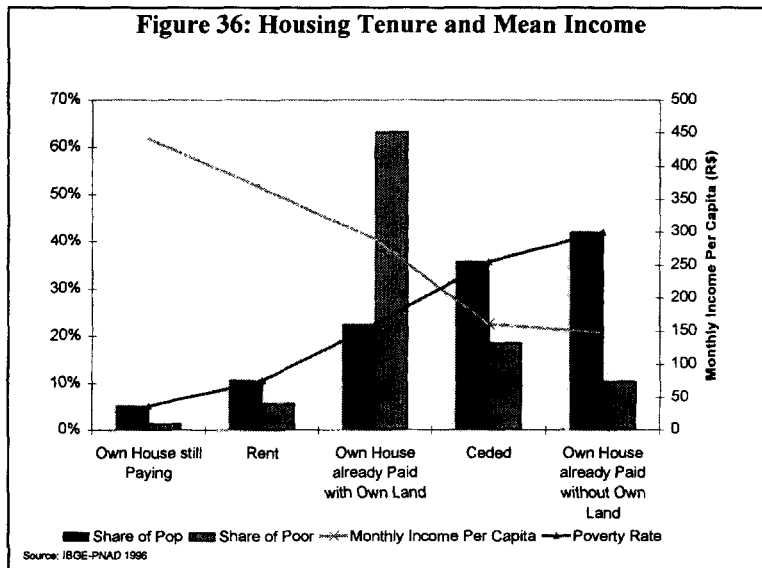
Table 16: Average Monthly Urban Household Expenditure on Rent or Mortgage

Consumption Decile	All Expenditures (R\$/month)	Housing Expenditure (R\$/month)	Share of Housing (%)
1 (lowest consumption)	236	51	21.8
2	347	71	20.4
3	395	83	21.0
4	471	108	22.8
5	596	153	25.7
6	647	161	24.8
7	836	189	22.6
8	992	265	26.7
9	1368	283	20.7
10 (highest consumption)	2522	526	20.9

Source: Calculated from 1996-97 PPV Survey

homes are gradually self-built using materials of poor quality (even non-durable materials) and often remain incomplete for a long

substantial share of favela residents exceeding 50% in some cities. In many cities, *favelas* have been established by earlier migrants whose standard of living has considerably improved over time.



period of time. Because their formation is unplanned, many *favelas* do not have access to roads and other basic infrastructure services such as water supply and sanitation.

170. Table 15 indicates the large number of *favela* homes in Brazil's major cities. The share of *favela* homes ranges from only 0.1% in Porto Alegre to over 40% in Recife. The Northern cities generally have a higher share of *favela* homes than the Southern cities (however, the local definition of *favela* varies). While *favelas* are often understood as low-income neighborhoods, their residents are in fact quite heterogeneous. As Figure 35 shows, the non-poor compose a

171. While *favelas* are visible due to their often central locations, they do not house the majority of urban poor. Many of the other urban poor live in the second type of informal areas, illegal land subdivisions (*loteamentos clandestinos*). In many cities, illegal subdivisions house the more recent and poorer migrants. Illegal subdivisions result from illegal commercial operations in the periphery of a city or a metropolitan region. Illegal land subdivisions are spatially

more organized than *favelas*. Their physical layout is somewhat similar to the formal areas of the city, often with clear street patterns and lot arrangements but without planned open spaces for public facilities such as schools and health centers. However, these lots are not serviced unless the Government later decides to provide basic services.

172. Tenure Issues. The types of housing tenure in urban Brazil exhibit a peculiar pattern across household incomes (see Figure 36). As the PPV survey data indicate, those who own a house but not land (typically in

Table 17: Type of Housing Occupancy by Region, Poor versus Non-poor

Urban Area	Rent (%)	Own (%)	Live in Ceded Property (%)	Live in Invaded Property (%)	All (%)
Metropolitan Regions, Northeast					
Fortaleza					
Poor	15	71	14	0	100
Non-poor	16	73	11	0	100
Recife					
Poor	17	66	16	1	100
Non-poor	18	76	5	0	100
Salvador					
Poor	10	74	7	9	100
Non-poor	20	73	5	1	100
Metropolitan Regions, Southeast					
Belo Horizonte					
Poor	14	70	11	4	100
Non-poor	17	72	11	0	100
Rio de Janeiro					
Poor	22	48	14	16	100
Non-poor	21	64	13	2	100
São Paulo					
Poor	22	52	21	5	100
Non-poor	19	72	7	2	100
Non-Metro Urban Areas					
Northeast					
Poor	14	69	14	3	100
Non-poor	18	72	9	1	100
Southeast					
Poor	14	67	18	0	100
Non-poor	17	73	9	1	100
All Urban Areas					
Poor	15	66	15	3	100
Non-poor	18	72	9	1	100

Source: Calculated from 1996-97 PPV Survey. Poor are those below the higher poverty line of R\$132 per capita per month.

informal areas) and those who live in ceded properties have the lowest average incomes. The majority of Brazil's urban households, with the next higher level of mean income, own the house and the land on which the house stands and have no outstanding loan for the house. The number of households who rent accounts for only a small share (12%) of all households, and their average incomes are relatively higher. The highest average income is found in the group of households who are still paying for their homes (or in other words, those who have been able to secure financing for their house).

173. More detailed data on the distribution of households by housing tenure type for urban areas in the Southeast and Northeast are shown in Table 17. Both the poor and non-poor households in most cities have over 65% home ownership (although without title in many cases). Less than 25% of the households live in rented homes. The only significant difference is that more poor

households live in ceded and invaded property than non-poor households. Table 16 shows housing expense data for those households paying a monthly rental or mortgage. The share of housing expenditure does not follow the typical pattern of declining with income.¹⁷ Because the rental housing market is small and formal mortgage housing finance is limited in Brazil, these statistics should be interpreted with caution.

174. The apparently high share of home ownership (over 65%) and low share of rental (less than 25%) in urban Brazil is partly the legacy of past government housing policies and partly the result of government control of housing rental prices over the years of high inflation (especially the 1980s). For many years, urban housing policies aimed to provide home ownership to the general public and protect them from high rates of inflation. Although inflation

¹⁷ Available empirical evidence shows that rent-to-income ratio typically declines with household incomes (Kessides 1993, p. 75).

has been under control for the last few years, the housing rental market has not been fully developed in most cities.

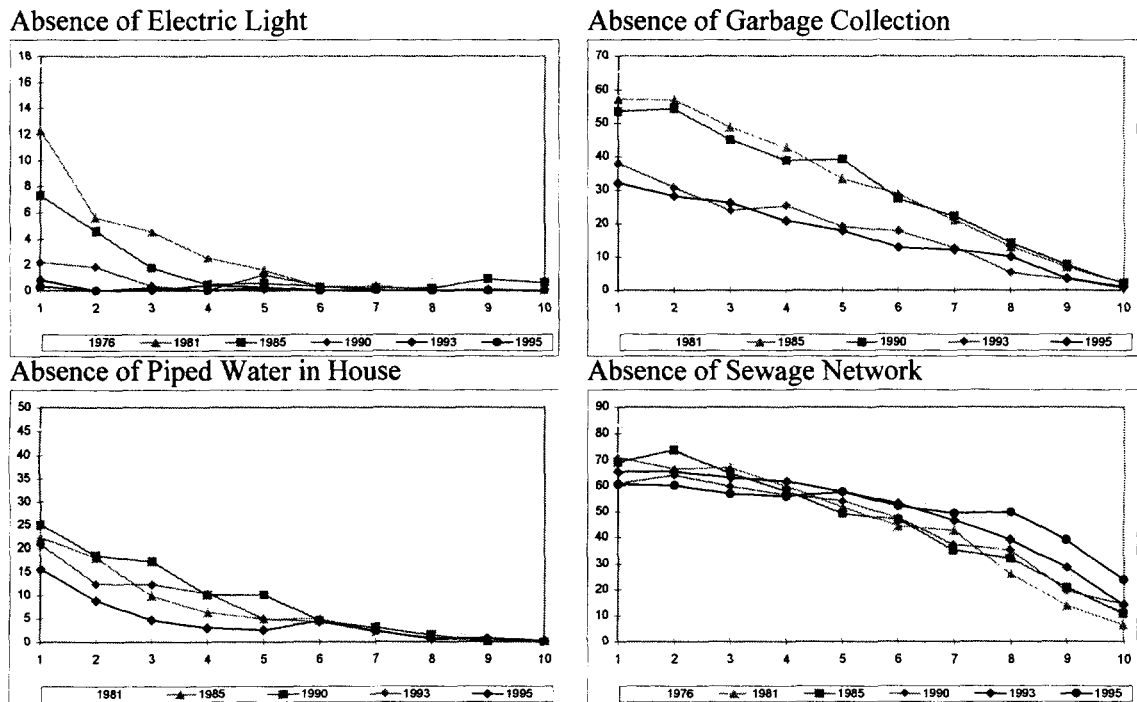
175. Coverage. Despite rapid urbanization, Brazil has, over the decades, greatly improved its urban services and achieved broad coverage with piped water and near universal urban access to electricity, as illustrated for the case of Rio de Janeiro in Figure 37. Urban service provision to the poor has also significantly increased over the last decades but is still lagging. There are still large gaps for sanitation, adequate shelter, and general urban services in poorer neighborhoods. Most of the poor live in over-crowded, low quality shelters in either *favelas* or outlying informal areas without the security of land tenure. Due to limited residential location choices, the urban poor, particularly those in the large metropolitan areas, are often not able to take advantage of employment and other social opportunities.

176. Housing supply in urban Brazil still falls far short of the requirements. In recent years, production of new housing units has been about one million annually, of which

188,000 units are funded through Government programs. There is serious underdevelopment of the housing market for the middle-income class. This is due partly to the low level of housing demand under high interest rates, and partly to the high costs of housing provision associated with lengthy Government approval procedures. Supply shortage for the middle-income households often hurts the low-income households through the crowding-out effect on the housing stock.

177. Municipal Management. The management of urban services is closely linked to the capacity of Brazil's approximately 5,000 municipalities. Municipalities have significant autonomy, including election of their own governments, passage of local laws, urban planning, and collection and usage of their own taxes and other revenues. Major sources of municipal finance come from urban real estate taxes, service charges, special assessments, and inter-governmental transfers. Per capita local government revenues and expenditures vary substantially even among the larger and wealthier municipalities. Municipalities depend heavily

Figure 37: Public Services by Income Decile over Time – Rio de Janeiro



on intergovernmental transfers; own revenues rarely exceed one-fourth of expenditures. The levels of per capita revenues and expenditures are typically lower than those for an average municipality in the Latin America and Caribbean Region.

178. Despite management autonomy, most municipal governments have very limited financial resources and technical capacity to deal with the contemporary municipal management issues. Financial constraints arise mainly from a large debt burden, ineffective municipal revenue collection, and inefficient operations of urban public services. For many years, municipalities have relied on funding from the federal government and international development agencies for development of water, sanitation, urban transport, and housing.

179. In theory, municipalities enjoy a high degree of fiscal freedom. Municipalities can set property tax rates and service charges, borrow from internal sources and, subject to federal approval, they can also borrow from external sources to address urban poverty issues. However, municipalities have not used their powers effectively to raise revenues. In fact, current fiscal regulations provide limited impetus to increase local revenues. Fiscal incentives and financing schemes, as well as inadequate coordination of responsibilities across government levels, undermine accountability of local governments and reduce the stimulus to improve service delivery. Extreme fragmentation into micro-municipalities, promoted by perverse fiscal incentives, undermines the economies of scale associated with service provision and administration.

180. Strong, autonomous municipalities, weak state governments, and the absence of effective metropolitan management arrangements pose a significant problem in the management of cross-municipality issues (such as metropolitan transport and solid waste disposal). Due to the growing distribution of poverty in the periphery, poverty in metropolitan regions is likely to become more of a metropolitan-wide issue. How-

ever, the current metropolitan regions are not independent units of government but only weak agencies of their respective state governments. While the role of these agencies is to coordinate common interests and resolve conflicts among municipalities, they are not authorities provided with secured financial resources sufficient for such a role. They do not have financial resources of their own and must therefore rely on grants from federal and state governments. Except in the area of metropolitan planning, they are largely ineffective in dealing with metropolitan-wide matters.

Programs and Policies

181. Housing Programs. Urban housing provision in Brazil is mainly a private sector activity especially in the housing market for the middle and upper income classes. At the same time, all three levels of government (federal, state, and municipal) are involved at varying capacities. In particular, the federal government has maintained a major role in housing finance. The state and municipal governments are mainly involved in programs targeted to the low-income groups, such as upgrading *favelas* and providing technical assistance to self-help housing construction.¹⁸

182. Official housing policies since 1994 emphasize the role of the market in providing housing for the non-poor. By encouraging market solutions for the provision of housing for the non-poor, public spending would be redirected to the housing needs of the poor. Three social housing programs, *Habitar-Brasil*, *Pro-Moradia*, and *Carta de Credito*, are directed at social housing solutions. The three social housing programs share the objective of improving the housing conditions of urban low-income households. Both *Habitar-Brasil* and *Pro-Moradia* provide funding for housing in *favelas* or very low-income neighborhoods. They are designed to target the households with incomes below 3 minimum salaries (R\$360 per

¹⁸ Typically, in self-help housing construction an individual constructs his own home with materials and instruction provided by the municipality or other government agency.

month per household). These programs target communities rather than households; therefore, they also benefit some households with incomes above the targeted 3 minimum salaries in the same community.

183. *Habitar-Brasil* is funded from the federal budget. Resources are transferred to states and municipalities based on both technical assessment and political consideration. The recipient states and municipalities are required to provide at least 10% in counterpart funds. The Federal Government does not impose condition for cost recovery. From January 1995 through June 1998, *Habitar-Brasil* financed a total of R\$1.09 billion in investments.

184. Resources for *Pro-Moradia* come from the severance fund, FGTS, and are provided to municipalities in the form of low-interest loans. As most municipalities (especially the smaller cities) do not have sufficient debt capacity, they are not eligible for the FGTS funds. As a result, FGTS funds tend to benefit mostly the larger and richer municipalities. From January 1995 to June 1998, *Pro-Moradia* financed a total of R\$1.07 billion in investments.

185. *Carta de Credito* is a housing credit program also funded by FGTS. *Carta de Credito* is made available to households with an income below 10 minimum salaries (around R\$1,300 per month). From January 1997 through April 1998, there were 300,000 transactions that involved a total outlay of R\$3.5 billion. Loans from FGTS resources have a nominal annual interest rate ceiling of 12%, thus there is a significant implicit subsidy to beneficiaries. Since households below 4 minimum salaries typically do not meet the program's creditworthiness requirements, they are in practice excluded from the program. The eligible income range (4 -12 minimum salaries) corresponds to the 46th to the 82nd income percentile. This means, only the top 18% are excluded and the benefits are concentrated in the third and fourth quintile, clearly demonstrating that this program is not socially targeted.

186. Urban Upgrading. A number of states and municipalities have implemented urban upgrading projects. In general, *favela* upgrading involves several steps, including physical planning of the site, creating access roads, providing basic infrastructure services (mainly water and sewerage), offering technical assistance for self-help housing construction and upgrading, and granting legal titles to land and housing properties. The visible success of projects like *Favela Bairro* in Rio de Janeiro, *Guarapiranga* in São Paulo, and *PREZEIS* in Recife has contributed to the popularity of the general urban upgrading approach.

187. Three valuable features are common to several *favela* upgrading projects. First, an employment generation component is included in the projects. It provides space for small businesses such as retail and commercial services. Second, the role of women is emphasized by giving land title to a female member of the household. Third, technical assistance services are provided by the municipal government. Typically, a government official is assigned to work at the neighborhood for an extended period of time. In addition to providing technical advice on self-help housing upgrading and construction, the official also provides guidance to the community on matters such as paying the water bill, obtaining business permits, and applying for housing loans. It is believed that these services are necessary for helping the *favela* residents overcome their isolation from the rest of the city and to participate in mainstream socioeconomic activities.

188. Table 18 provides a cost breakdown for a low-cost *favela* upgrading project, based on actual contracts for *Habitar-Brasil* projects in the Recife metropolitan region. The costs of *favela* upgrading usually include the costs of basic infrastructure (access roads, piped water, sewerage, and drainage) and community public facilities (playgrounds and community centers). The estimates show infrastructure costs of about R\$2,000 per household and housing/land costs of about R\$5,000 per household. Land

Table 18: Cost Breakdown of Urban Upgrading, Recife 1998

Item	R\$ per Household	Percent of Total
Infrastructure		
Access Road	450	6.3
Drainage	350	4.9
Piped Water	300	4.2
Sewerage	750	10.4
Electricity	140	1.9
<i>Subtotal</i>	<i>1,990</i>	<i>27.7</i>
Land, Structure and Other		
Lot Clearing and Leveling	500	7.0
House ¹	2,800	39.0
Land Acquisition	1,300	18.1
Miscellaneous	595	8.3
<i>Subtotal</i>	<i>5,195</i>	<i>72.3</i>
Total	7,185	100.0

¹ Brick, 32 square meters, including material and construction.

Source: Estimated by COHAB based on *Habitar-Brazil* projects in Recife Metropolitan Region.

acquisition costs, in particular, can vary widely by city. In São Paulo, for example, the cost of urban upgrading can reach R\$20,000 for households that require new housing.

189. One problem with *favela* upgrading is that the high subsidy implicit in limited cost recovery mechanisms often implies a significant transfer to the non-poor. *Favelas* are heterogeneous and house many non-poor. In particular, 54% of *favela* dwellers in urban areas do not come from the bottom quintile of the distribution. Targeting among and within *favelas* and directing attention to low-income neighborhoods that are not *favelas* is thus of critical importance.

190. Land Use Regulation. There are four levels of urban land use regulations: master planning, land subdivision, regulation of lots, and regulation of lot services. Master planning is required by the Constitution for every municipality with a population over 20,000 inhabitants. Master planning broadly determines land use by purpose (for example, by residential, industrial, and commercial usage). Land subdivision controls the lot size and layout, street pattern, and space for public facilities. The lot and service regulations pertain to the layout and structure of the building and the connection of electrical, water, and sewerage services.

191. The 25 year old federal land subdivision law was problematic from the moment

it was conceived. The law requires the implementation of all infrastructure (including streets, water supply, and sanitation) and public space before subdivision; it also imposes a minimum lot size (125 square meters). Due partly to the pre-subdivision requirements and partly to lengthy Government procedures, the paper-work required for the approval of a subdivision often takes a very long period of time to complete (usually 2 to 6 years). Knowing the deficiencies in institutional enforcement, private developers in the periphery largely ignore the land subdivision laws. They buy rural land on the city periphery, subdivide the land into housing plots and sell the largely unserved lots to low-income households (or middle-income households who are unable to afford the high prices of formal lots and/or houses). These households then build their own homes with self-help construction methods.

192. Given the large demand for urban land from low-income households, strict land use regulation typically leads to the more rapid growth of informal areas. In Brasília, for example, land use regulations are among the most rigid of any major city. Under existing regulations, it is nearly impossible for the poor to find affordable homes in the formal areas that comply with the zoning laws and building codes. The combination of excessive regulation inhibiting formal land occupation and the availability of open space induces invasion of public land. As a result, approximately 60% of the

residential areas are now informal, and 51% of housing units are not in compliance with existing regulations.

193. Many municipal governments have initiated special programs to legalize informal areas and formally integrate them into the municipality. This integration typically involves the granting of formal long-term land rights to the occupants of informal areas. These programs, however, typically prohibit land transfer (except in the case of inheritance). While the policy instruments for the regularization of informal areas are in place and tested, the process turns out to be extremely slow in most cities due to slow institutional processes and a lack of government financial and technical resources. When areas protected by law for special purposes become informally inhabited, the regularization is further complicated. The *Guarapiranga* Area of São Paulo, for example, is protected by the Watershed Protection Act. The regularization of over 100,000 informal residents in this area will not be possible if the laws are not modified (Imparato 1998).

194. Reforming the rigid and unrealistic urban land use regulations is one important step that municipal governments can take in dealing with informal areas. Experience in Curitiba demonstrates the importance of regulation reform. The Municipality of Curitiba declared the entire municipality as an urban area in its 1960 municipal master plan. This effectively removed the excessive legal requirements for the conversion of rural land into urban land, thus giving governments the flexibility to legalize informal areas. As a result, all residential areas are formal and 92% of housing is in compliance with legal standards.¹⁹

Elements of a Strategy

195. The main constraints to improvements in urban infrastructure and housing for the poor include: lack of financial re-

sources at the municipal level; inefficient public provision of basic infrastructure services; the existence of excessive land use regulations; and the absence of effective cost recovery mechanisms. The overall strategy for providing better urban services to the poor is based on the economic principles for poverty reduction policies that were stated in the introduction to this report. This strategy for improving urban services has five elements:

- (d) Improving the functioning of housing markets for the non-poor. An improvement in housing markets for the non-poor will increase the overall housing supply and thereby avoid the crowding out of the poor.
- (e) Improving access of the poor to formal housing. This improvement can be achieved by reforming regulations, regularizing informal housing, and offering lower cost housing solutions to the poor.
- (f) Offering choices to and increasing the effective participation of those who benefit from urban improvements.
- (g) Increasing the targeting of subsidies to the poor and improving cost-recovery mechanisms.
- (h) Improving the incentives and strengthening the capacity of municipalities to ameliorate service delivery and implement the proposed strategy.

196. Making Markets Work. Housing markets in Brazil are seriously underdeveloped, especially for the middle class. Different segments of the urban housing market are interrelated, and changes in the supply and prices of one segment will affect the quantity and prices of another. In particular, supply shortages for the middle class hurt the low-income households through a crowding-out effect. Therefore, the urban poor would generally benefit from expanded supply and reduced prices resulting from public policies that foster an efficient (and unsubsidized) urban housing market.

¹⁹ The data of share of informal areas and housing in compliance for both Brasilia and Curitiba are from HABITAT Urban Indicators 1993.

197. Reform of the housing market involves several preconditions. First, lasting macroeconomic stability is fundamental to lowering interest rates and making housing more affordable. Second, financial sector reform is critical to improving access to affordable housing finance. Third, rigid land use, building, and tenancy regulations reduce the stock of affordable housing and depress the rental market, which could otherwise produce more affordable housing options for the poor. Excessive and unenforced land-use and building regulations segregate and depress housing markets, undermining effective planning. Regulatory reforms consequently have the potential to increase the stock and reduce the cost of housing²⁰.

198. Giving the Poor Access to Formal Markets. Currently, inefficient operation, flawed incentives, high technical standards, limited participation, and lack of demand orientation for the provision of urban services make many services unnecessarily expensive for the poor. Consideration of lower-cost alternatives combined with strong and effective community participation in designing and implementing incentives for cost effectiveness can make basic urban services affordable to many of the poor. Private sector delivery of urban services is an important component of this strategy.

199. Regulatory reforms can help make formal housing solutions more accessible to the poor. Possible reforms in land use regulation include the relaxation of zoning laws and building codes, particularly the lowering of infrastructure standards required for housing lots so that housing can become more affordable for the poor.

200. The regularization of informal settlements should gain higher priority and include mechanisms that avoid incentives for the formation of new informal settlements. The restriction on transactions of legalized

informal property (now formal property) should be lifted so that the poor are able to make any necessary residential relocations in the future while benefiting from the market transaction. This change in regulation will create opportunities for real-estate development in upgraded *favelas* and promote urban land use efficiency.

201. Offering Choices and Strengthening Participation. Urban and housing projects typically transfer resources in-kind (for example, housing materials, housing, and physical services). The cost of these services often exceeds the poor's willingness to pay. Ownership transfers (often illegal) after completion of urban upgrading shows that the resource transfer in-kind does not meet the most urgent demand of at least some residents. In-kind provision of services includes the risk that the services provided do not accurately reflect the preferences of the poor. When in-kind provision of services fails to reflect preferences, the poor would be better off if they received a cash transfer equivalent to the value of the in-kind service.

202. In the case of urban upgrading, the fixed cost of water and sanitation networks and the externalities of having greater job opportunities from living in a formal neighborhood often require public action in the form of in-kind service provision. The level and cost of services provided should therefore depend on the average willingness to pay of the community. Service levels significantly exceeding the average willingness to pay of the residents are unlikely to be sustainable. If the cost of services exceeds the willingness to pay of a small share of residents, they will sell out and resettle in lower value housing. This process should not be obstructed.

203. An exception to the principle of demand orientation would be the provision of the most basic services that the Government is actually able to universally provide. For example, urban Brazil is approaching universal access to piped water and electricity. If these services are truly universal, their

²⁰ For more policies concerning the reform of the overall housing market, see Alberdi, Duebel, and Serra (2000).

provision would not be unsustainable even where willingness to pay is insufficient to cover the capital (but not the recurrent costs) of services. For other services, such as basic shelter and sewage, Brazil is far from universality and cannot expect sustainable provision beyond willingness to pay.

204. In the past, Government programs to help the low-income poor were largely sector-based, particularly for sanitation and housing. Such programs permit little choice to beneficiary households and communities. An integrated multi-sector approach permits the determination of priorities at the community level and promises better results. Experience shows that integrated urban upgrading (housing, different urban services, social services and income opportunities) produces more sustainable results than individual sectoral improvements.

205. Municipal governments should be encouraged to adopt a community-based and multi-sectoral approach. Community participation processes further increase the likelihood of success for a multi-sectoral approach. The model of community driven development, in which resources are directly transferred to community associations for the implementation of priority projects, should be explored as a possible implementation mechanism²¹. The comprehensive approach adopted in *favela* upgrading projects in Rio de Janeiro provides an interesting prototype. It also illustrates the challenge of balancing depth (large improvements and integrated approaches in selected neighborhoods to achieve a catalytic effect) and breadth (broader reach of programs and higher sustainability with low costs per household).

206. Targeting and Cost Recovery. Low cost recovery and inferior targeting of subsidies for housing and urban services undermine financial viability of service delivery and, given fiscal constraints, effectively exclude many poor from receiving urban ser-

vices. Subsidized housing loans are expensive and are not reaching the poor. In particular, the *Carta de Credito* program should not be continued in its current form.

207. The attempt to transfer resources to the poor through urban services is problematic for several reasons: (a) service provision above willingness to pay can result in the beneficiary selling out, often at a net loss; (b) subsidized service provision according to willingness to pay implies higher subsidies for the non-poor than the poor (because the non-poor should have a higher willingness to pay) and thus targeting is misdirected; (c) depending on the factual tenure situation, service provision may benefit non-poor property owners rather than poor tenants; (d) poor and non-poor residents share the benefits of a wide range of public infrastructure services; and (e) subsidies create inefficiencies since, for many services, they change consumption patterns or the level or quantity of services used.

208. Because of the difficulties of targeting subsidies to the poor through urban and housing services, the Government should not opt for subsidization. Rather, the Government should seek full cost recovery of capital and recurrent costs. Cost recovery would be achieved through loans (in the case of private goods such as housing), user charges (for network services), and property taxes (for basic public infrastructure). Cost recovery in urban upgrading needs to be preceded by full cost recovery for services provided to the general population. Moreover, cost recovery needs to be embedded in the reform of overall municipal pricing and taxation, which includes setting and updating tax codes and enforcing collections rather than allowing exceptions for special interest groups.

209. Any subsidy for urban services should be based on a sound cost recovery and poverty targeting policy. Subsidies should be concentrated on and limited to capital cost subsidies for urban services to the poor who have been identified through means-testing. In order to ensure sustainability of any ser-

²¹ Brazil has a rich experience with this approach in the context of Bank-financed rural poverty alleviation projects in the rural Northeast.

vice, residents have to pay the full cost of operation, maintenance, and replacement. In addition, the Government may want to adopt a narrowly described list of "survival" services, such as basic shelter and water standpipes, which could be guaranteed and provided free of charge. These services should be designed such that the choice of technology makes them unattractive to the non-poor but still cost efficient.

210. If subsidies were limited to the poor, and if mistargeted subsidies were phased-out, the resources saved could be applied for broader coverage of the most basic urban services to the poor. The list of services, which would be universally available, could initially include access to potable water and electricity and would be expanded to the most basic shelter and sanitation as national income levels grow.

211. Municipal Strengthening. There is an urgent need for strengthening the capacity of municipalities to manage problems related to urban poverty. This entails:

- (a) Reforms of the fiscal transfer and financing system including the conditioning of certain fiscal transfers on service provision to the poor;
- (b) A clearer assignment of responsibilities between government levels that would ensure full accountability at the local level;
- (c) An end to the creation of non-viable micro-municipalities;
- (d) Directing resources to viable municipalities capable of managing urban poverty problems;
- (e) Effective approaches for dealing with the problems of the existing micro-municipalities, such as regional area development plans;
- (f) Creation of metropolitan planning and service authorities to handle metropoli-

tan-wide issues such as transport and solid waste disposal.

212. Experience from the Medium-Sized Cities Project suggests that the basic technical capabilities and institutional structures required for successful preparation and execution of municipal development projects are likely to exist now in secondary cities throughout Brazil. It would be appropriate to expand the practice of Municipal Development Funds at the state level to help these cities address poverty-related infrastructure and housing issues. As a necessary first step, technical assistance in the area of municipal finance and management should be provided to smaller cities.

213. Demand for urban infrastructure services from all income groups will be rapidly growing in Brazil as the urban population and incomes continue to increase. Such demand will place municipal governments under constant pressure. Simultaneously, the revenues of municipalities will be expected to play a greater role in meeting the expanding demand for urban services. The primary candidate for an expanded municipal revenue source is property tax. Although municipalities are given autonomy to set the tax rate, property tax generally suffers from collection problems that arise partly from a lack of willingness on the part of the government to enforce collection and partly from the severely inadequate income collection database. A complementary strategy requires the privatization of municipal services. The reward for privatization is likely to be greatest for water and sanitation services, as these constitute the largest financial burden of most state and municipal governments at the moment.

Water and Sanitation²²

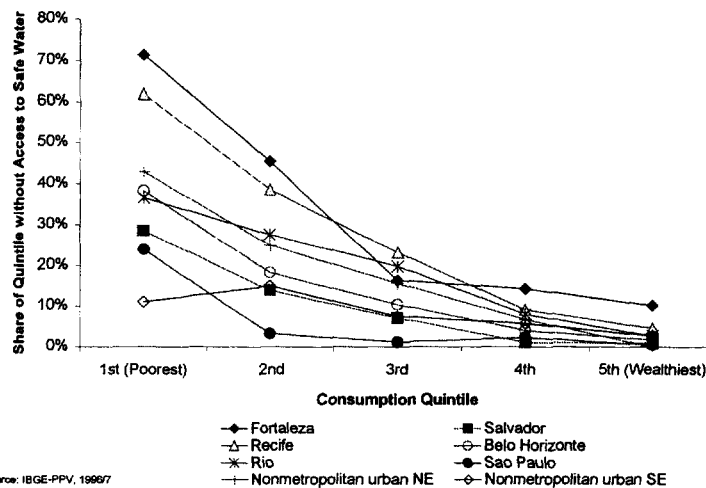
Service Coverage and Policies

214. In urban Brazil, network coverage is approximately 86% for water and 49% for sewerage, with the latter being one of the worst among Latin American countries. There is a significant disparity in network coverage between the southern and the northern regions. Urban water coverage reaches 96% in the more prosperous Southeast, but only 68% in the poorer Northeast. For the low-income households served by the public network, service reliability is generally very low. It is not uncommon in the Northeast that piped water is available only two to three days per week and only for a few hours each day. Sewerage coverage is 52% in the Southeast and only 15% in the Northeast (World Bank 1998b, p. 3). Only 20% of the collected sewage is treated at least partially. Much of the untreated wastewater and sewage is dumped directly into rivers and the ocean, causing serious water pollution.

215. The level of water and sanitation services is highly associated with household income. Figure 38 and Figure 39 show that poorer households are far less likely to be connected to the general water and sewerage networks. The expenditure on clean water does not appear to be a major financial burden for

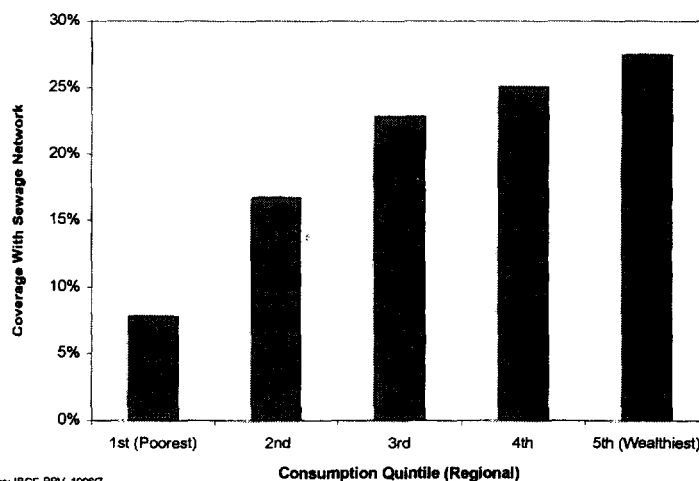
the urban poor. As the data in Table 19 indicate, the share of household expenditure on clean water over total household expenditures is less than 2.5% across all income groups (1st through 5th quintile). It must be cautioned, however, that water suppliers (particularly the state water companies) fail

Figure 38: Water Service by Consumption Quintile



Source: IBGE-PPV, 1996/7

Figure 39: Sewage Network Coverage by Consumption Quintile



Source: IBGE-PPV, 1996/7

to collect water fees from many users, especially those living in the low-income neighborhoods. The average share would be higher for the poor if they all paid the full amount of their water bill. On the other hand, however, some urban poor might have spent less money on water if they had been

²² Many of the recommendations of this section, in particular in regard to tariff and subsidy issues, are equally applicable to electricity access. However, the issue requires less attention as 99% of the total urban population and 95% of the urban poor have already access to electricity.

Table 19: Average Monthly Household Expenditure on Clean Water

Consumption Quintile	All Expenditures (R\$/month)	Clean Water Expenditure (R\$/month)	Share of Clean Water Expenditure
1	250.00	5.29	2.1%
2	379.80	8.27	2.2%
3	542.90	12.27	2.3%
4	790.55	14.28	1.8%
5	1795.30	19.13	1.1%

Source: Calculated from 1996/97 PPV Survey

served by the network rather than water truck services.

216. Current coverage levels by income group represent a stock of investments accumulated over decades. Recent investment spending could (and likely is) less regressive as the market for higher income consumers becomes satiated and government programs increasingly focus on poorer residents.

217. In the past, the dominant share of government funds for the sector has gone to water supply. As a result, water network coverage is much more extensive than sewerage coverage. The current national policy emphasizes the coverage expansion of water supply and sanitation to the entire population. The urban service coverage targets for 1999 are set to be 96% for water (from 86% in 1995) and 65% for sewerage (from 49% in 1995) (World Bank 1998b, p. 37). During 1995-97, total government investment amounted to R\$4 billion.

218. Efforts to modernize and increase the efficiency of public water companies have been undertaken for some time and have yielded overall disappointing results. So far, most water and sanitation services are provided by state water companies (SWCs) that typically operate with municipal concessions. In addition, a large number of smaller systems is operated by municipalities or municipal companies. Increasingly, the privatization of water and sanitation companies is seen as a fundamental step toward higher operating efficiency and increased sector investment. Obstacles to privatization include the weak regulatory framework and the existing ambiguity regarding the division of power between state and municipal governments.

219. Several national programs currently underway are aimed at providing services for the poorer population and increasing the efficiency and level of modernization of the water and sanitation sector. Programs are funded from the FGTS severance fund, the federal budget in the form of intergovernmental transfers, and through funds from international development agencies. These national programs include:

- (a) PROSANEAR. PROSANEAR is a pilot program using non-conventional technology to provide water and sanitation services to the urban poor. It is estimated that by the end of 1997, PROSANEAR provided in-house water connection to 900,000 poor people at the cost of \$98 per person, and sewerage systems to one million poor people at the cost of \$140 per person (Katakura 1997). The program adopted cost-effective technology, and emphasized community participation in the design, implementation, and management of services. While the immediate success is obvious, a central question remains to be answered: Are the project-life costs of the PROSANEAR low-cost alternatives really lower as compared to the conventional technology? It will require some years of operations to generate data for an assessment of project-life costs, which include both capital and recurrent costs.
- (b) Pro-Saneamento. Pro-Saneamento is a federal program designed to expand service coverage and reduce service deficits. The program is funded through FGTS, which limits participation to municipalities with remaining debt capacity and excludes many smaller municipali-

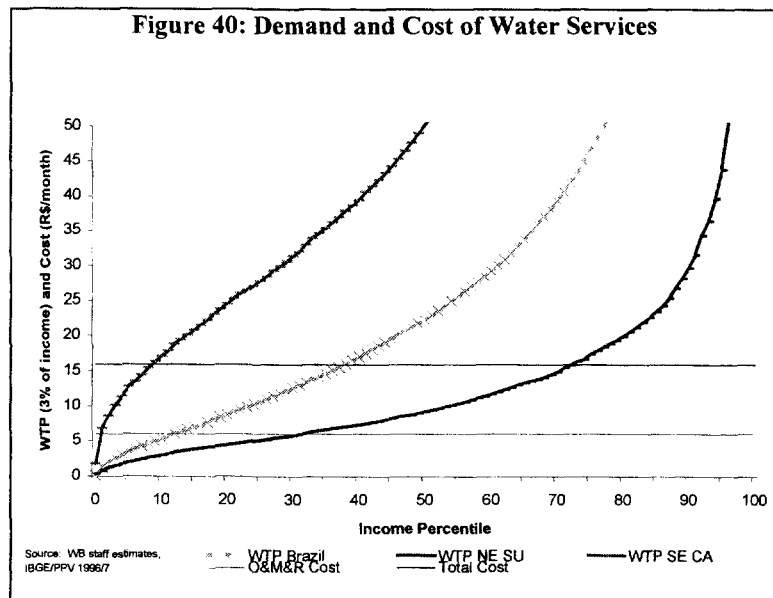
- ties where the sanitation deficits are the greatest.
- (c) PASS. PASS targets low-income areas selected by the federal government based on criteria that include neighborhood conditions and infant mortality rates. Federal funds are transferred directly to these areas and complemented by local counterpart funds of up to 40%.
- Other programs include PMSS (sector modernization), PQA (water quality control) and PNCDA (water leakage control).
- (b) Running water and sewage connection provide convenience and direct consumption benefits.
- (c) Water networks and in-house connections that substitute for water truck services can reduce the household expenditures of the poor even when water charges cover the full cost of service.
- (d) Under the condition of land tenure security, improvement in water supply and sanitation will increase the value of land and shelters occupied by the poor.

Benefits and Demand

220. Based on many studies of the benefits of water and sanitation services, there is little doubt that it is desirable to provide at least very basic water and sanitation services to the entire population, regardless of income. Depending on local conditions, however, it is not always feasible to provide network connections. In particular, access to clean water and sanitation provides several important benefits:

- (a) Both clean water and sanitation generate substantial health benefits directly to the poor (by reducing mortality and morbidity) and directly to the entire urban community (in the form of positive externalities) (World Bank 1994, p. 20). Empirical evidence obtained in Brazil suggests that the average mortality rates for both infants and children under the age of five would be reduced by almost 3% with a 10% rise in urban access to piped water and by 2% with a 10% rise in urban access to sewerage (World Bank 1998b, p. 20).

221. Based on these benefits, there is significant demand for water and sanitation services even among the poor. In fact, the willingness of the poor to pay for quality services (availability and reliability) is often under-estimated. The health benefits and related externalities can provide a justification for subsidized service connection to the poorest.



222. The share of the population that is willing (and able) to pay the full cost or the operations and maintenance costs of water supply differs widely by region. It is frequently assumed that households are willing to pay about 3% of household income for clean water services. Figure 40 shows this

willingness to pay over the population distribution for different regions. In the capital cities of the Southeast, virtually everyone can afford the operations and maintenance costs (assumed to be R\$6 per month per household), and 85% of consumers can afford the full costs of services (assumed to be R\$16 per month per household). In contrast, in the small urban areas of the Northeast, almost 40% of consumers cannot pay the operation and maintenance costs, and complete coverage is unlikely achievable without substantial subsidies. At the national level, less than 20% of consumers cannot afford the operation and maintenance costs. One option for attending to this population group is to lower technical standards and introduce lower cost options.

Sector Reforms, Tariffs, and Subsidies

223. There is a broad consensus that the SWCs are inefficient and that private sector participation should be encouraged. Efficiently-designed and competitive private participation in the sector coupled with the elimination of subsidies to non-poor residents are key to the sector's financial recovery and better service access for the poor. However, the benefits of privatization will accrue to the poor only if: (a) the tariff reforms are implemented; (b) concession contracts specify clear service coverage targets for the poor; and (c) concessions are subject to effective regulatory oversight.

224. Currently, even though tariffs are generally high, revenues collected are not sufficient to cover the full cost of service provision. The underlying problems include: (a) unaccounted water losses reaching 40% for most SWCs; (b) lack of effort in bill collection, especially in low-income neighborhoods; and (c) lack of individual water meters, which encourages excessive consumption. Increasing block rates are widely used. Social tariffs for water and sanitation services are common but linked to water consumption or place of residence rather than income. Current social tariffs provide inefficient incentives and fail to adequately target the poor.

225. The design of tariffs and subsidies is fundamental to: (a) ensure the financial viability of the sector and permit service expansion to those presently uncovered; (b) provide incentives to the provider (whether public or private) to serve the poor; and (c) ensure affordability to the poor. Current tariffs do not serve these objectives and need to be reformed with urgency based on a coherent policy along the following lines.

226. All residents should pay at least the full operation, maintenance and replacement cost of the chosen systems. This requirement ensures financial sustainability of the system after the initial investment. Any exception from full operation and maintenance cost recovery should be very narrow, clearly defined, and well justified by externalities or other reasons. Also, a source for the continued subsidization of these exceptions needs to be identified. In all other cases, where system operation and maintenance costs exceed willingness to pay, lower cost solutions should be sought (for example stand-pipes, or simplified systems instead of house connections). Only the most rudimentary access (such as public standpipes) should be provided free of charge in the poorest neighborhoods.

227. Subsidies (whether fiscal or cross-subsidies) should be subject to a per-household ceiling. Subsidies should be issued only for capital costs and only to the poor. Poor residents are identified through a means-test rather than consumption levels. The assumption that poverty is closely correlated with low water consumption quantities has been proven wrong in various studies. Therefore, poor consumers need to be identified by an explicit approach to determine their income.

228. If cross-subsidies are applied, they cannot be part of overall revenues but have to be withheld from the operator and paid out as a capital cost subsidy per poor household served. Cross-subsidies between different consumer groups distort incentives against serving subsidized consumers. With cross subsidies, the operator has an incentive

to serve as many subsidizing consumers and as few subsidized consumers as possible. Since the subsidized consumers are typically poor, cross subsidies create an incentive against serving poor consumers. This disincentive means less service for poor consumers unless there are detailed coverage targets for poor consumers that are perfectly supervised and implemented (which is highly unrealistic).

229. Cross subsidies are, therefore, only acceptable if they are directly tied to the number of subsidized consumers served. One such mechanism is to channel any revenues from charges that exceed service costs to a trust fund or escrow account from which the operator receives a specified amount only and explicitly for each poor (subsidized) household served. In practice, this means that non-poor consumers are charged a tariff that exceeds costs. The excess charge would be specified on the bill and would flow to the escrow account and not to the operator. For a poor (subsidized) consumer, the operator issues two bills, one with the subsidized tariff to the consumer and one for the difference between the subsidized tariff and service cost to the escrow account. As a result, the operator can explicitly charge the full cost for every consumer it serves (poor or non-poor) and thus has a clear incentive to serve all of them.

230. The most appropriate tariff is a two-part tariff with a fixed connection charge (that would correspond mostly to capital costs), and a variable, consumption based, charge (that would correspond mostly to operations and maintenance costs and possibly a share of capital costs). The fixed charge would replace the currently existing minimum consumption charges that are distortionary. Since the fixed charge corresponds to capital costs, and any subsidy for poor consumers would apply to capital costs only, it would be desirable to apply any subsidy through the fixed charge only. Applying subsidies through the variable charge would create distortions; thus, there would be an implicit desire to direct subsidies through the fixed charge. If a two-part tariff

is fully implemented, and subsidies are applied to the fixed charge, there is no need for a "social" variable charge.

Urban Transport

231. Urban transport services affect the personal welfare of all income groups through travel costs (out-of-pocket cost and time cost) and by influencing location choice and job opportunities. High transport costs limit the location choices of both firms and households, leading to inefficient land use and low productivity. With a deficient urban transport system, travel costs increase, urban productivity declines, the standard of living worsens, and all income groups suffer. However, the rich are often able to adjust their residential location or travel behavior to partly compensate for high travel costs. As the poor have fewer resources, they tend to suffer the most. In some cases (especially in large metropolitan areas), high travel costs limit the ability of the poor to search for and commute to jobs. The lack of affordable transport also reduces the opportunities of the poor to access basic social services such as health care and education. Therefore, provision of affordable public transport services to the poor can expand their ability to take advantage of employment and social opportunities.

232. The poor neighborhoods in both large and small urban areas generally have insuf-

ficient road access and inadequate connection to public transport. Due to longer trip distances and more serious road congestion, the poor living in large metropolitan regions face much more severe urban transport problems than those living in smaller cities. Average trip distances in large metropolitan regions are generally longer for all income groups, but commuting distances for the poor may be longer as many of them have residential location choices limited to areas distant from employment centers.

233. Table 20 presents the modal splits and average time spent for commuting trips by income group for three metropolitan regions (Fortaleza, Rio, and São Paulo). In all three cases, the poor commute primarily by public transport and walking. Residents of Rio de Janeiro and São Paulo spend a longer time commuting than residents in Fortaleza. It is striking that the richest group has the shortest commuting time among all income groups in all three cases. This suggests that the richest group either has a shorter commuting distance, faster commuting mode, or a combination of both.

234. Figure 41 and Figure 42 show the incidence of different modes of transport. Most of the poorest do not make regular

Table 20: Commuting Modal Splits by Consumption Quintiles

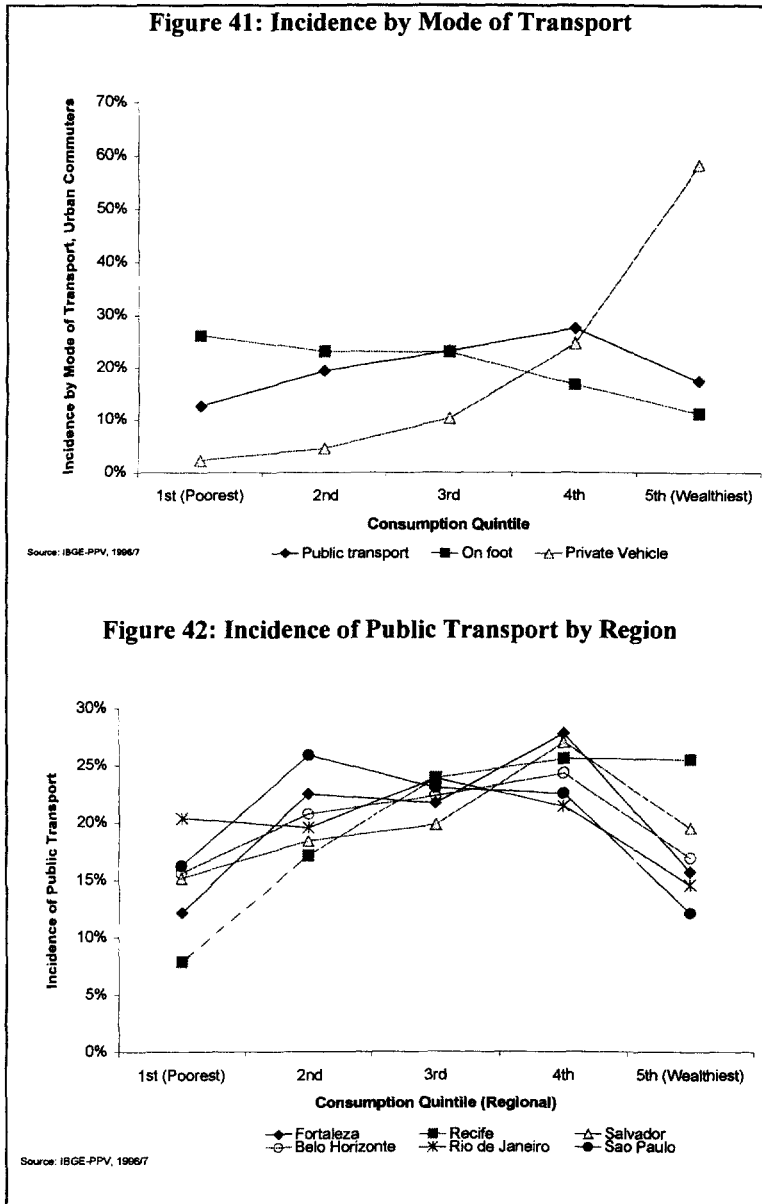
Metropolitan Region & Quintile	Modal Share						Average Time per Trip (min.)*
	Public Transport (%)	Walk (%)	Private Vehicle (%)	Other (%)	Work Where Reside (%)	All Who Reported (%)	
Fortaleza							
1 st (lowest income)	25	40	2	12	21	100	26.2
2 nd	39	32	2	12	14	100	34.2
3 rd	36	23	3	10	27	100	25.6
4 th	41	19	9	7	24	100	27.8
5 th (highest income)	24	6	49	5	16	100	23.5
Rio de Janeiro							
1 st (lowest income)	46	21	10	9	13	100	28.5
2 nd	57	25	4	3	10	100	40.4
3 rd	59	15	12	7	7	100	35.6
4 th	58	11	14	3	14	100	38.5
5 th (highest income)	38	11	32	4	16	100	25.8
São Paulo							
1 st (lowest income)	53	24	7	1	16	100	39.4
2 nd	48	28	8	11	6	100	40.6
3 rd	56	11	14	5	14	100	39.4
4 th	46	20	20	4	10	100	35.1
5 th (highest income)	23	10	52	3	12	100	25.1

* Other studies have found much longer commuting times, especially for public transport users, in the order of 40 minutes in Fortaleza and 90 minutes in São Paulo and Rio de Janeiro.

Source: IBGE, 1996/97 PPV Survey

commuting trips because they do not have a regular job. When they make trips, they are often unable to afford the cost of transportation requiring some form of payment and must instead walk to their destination. Where the poor have little choice of modes

Not surprisingly, the use of individual automobiles is highly concentrated in the top two quintiles. While most public transport investments in busways, suburban trains, and metros are not as well targeted as many other social investments, their targeting is very favorable in comparison with investments geared toward individual automobile users, almost all of which come from the top two quintiles.



other than walking, they have to spend time and personal energy that could otherwise be used for more productive activities. Public transport is predominantly used by the second to fourth quintiles (population groups that have a stable job but are not among the better-off and able to afford automobiles).

235. Sector organization. Provision of urban transport services involves the public and private sectors. According to the Constitution, local authorities (municipalities for intra-municipal transport and states for inter-municipal and metropolitan transport) are solely responsible for urban transport matters. There are some exceptions, however. Commuter rail services are still provided by either the federal or state governments. The metro systems in São Paulo and Rio de Janeiro had long been owned and operated by their respective states. Recently the Rio de Janeiro metrorail, the suburban railway, and the ferry boat systems were concessioned to the private sector. The trend for most suburban rail and metrorail systems involves the transfer of authority from federal to local agencies followed by concession to the private sector. Urban bus transport services include those that are fully privately owned and operated (mainly buses), privately operated under concessions (metros, suburban rail, and one busway), and fully publicly owned and operated (which is becoming less common). Selectively, the federal government has provided funding for urban roads, buses, and

subway rolling stock. Most of these investments are concentrated in nine metropolitan regions.

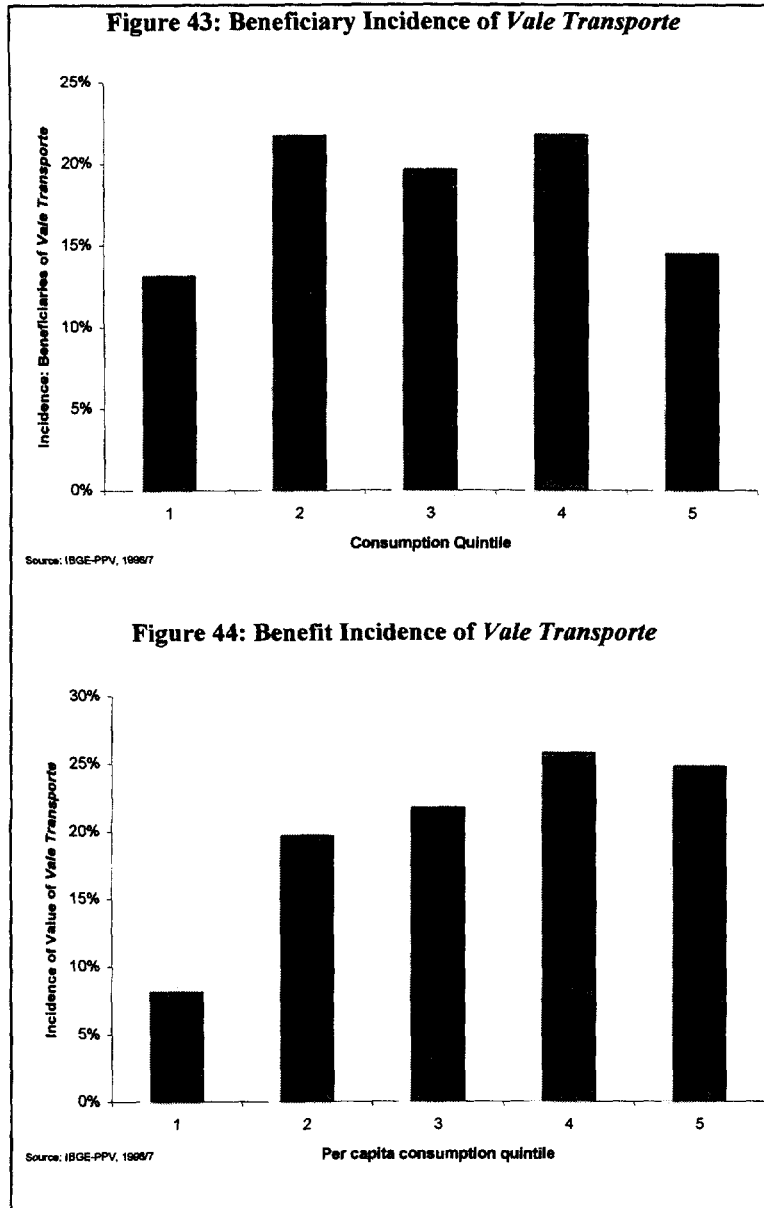
236. Informal services. Another major development is the rapid growth of informal transport services provided by unregistered operators. The informal operators use vans and minibuses to provide flexible-route and flexible-time services. Their services contrast with formal sector services that typically employ only full-size buses, regardless of market characteristics. In 1997, the informal sector added a total of 34,000 vans, minibuses, and passenger cars into service. Due to their flexible routing and scheduling, the informal transport sector can provide door-to-door service and has captured a sizable share of the markets in São Paulo and Rio de Janeiro to the detriment of the formal, regular bus services. The informal sector mainly serves two different markets: upper middle-class passengers who prefer more flexible services and the very low-income passengers from the periphery neighborhoods that are poorly connected with formal transport services. Tariffs charged by the informal transport sector are typically equal or higher than those charged by the formal sector operators. Accident rates of informal operators are much higher due to lack of training and vehicle safety features and excessive speed. A large number of small informal transport vehicles add considerably to congestion in the central business districts of some cities. Most municipal governments have tolerated these informal services. Initial acceptance of informal transport by users has been followed by increasing disapproval due to safety concerns.

237. Public transport ridership. Due to the continuing increase in car ownership, the growth of informal transport services, and a decline in formal sector employment, many cities have experienced steady ridership declines in the formal sector during recent years. On average, ridership declines at about 5% per year. Even in Curitiba, a city known for its pro-transit policy and integrated land use/transit service planning, rid-

ership has declined by 3.6% during 1995-97 (from 316 million passenger trips in 1995 to 304 million passenger trips in 1997).

238. Modal and fare integration. In large cities, many public transport users require two transfers to reach their destination (local bus to intercity bus/train, other local bus/metro to final destination). Due to the lack of modal and fare integration in most cities, users typically have to pay a total of R\$6-8 per round trip, or more than R\$150 per month. The transport cost of one commuter would constitute 60% of house income of a four-person household at the extreme poverty line or 30% of household income at the higher poverty line of R\$132 per capita per month. The main obstacle to fare integration is that local buses are under the jurisdiction of the municipality while intermunicipal buses, metro, and trains are under the jurisdiction of the state. The move towards private concessions also complicates fare integration unless clear provisions to this respect are included under the concession arrangement. The introduction of electronic ticketing systems (smart cards) will facilitate the implementation of integrated fares in the future. Regional transport coordination commissions play a critical role in promoting modal and fare integration.

239. Public Transport Voucher Program. In 1986, in response to violent protests against bus fare increases, *Vale Transporte* (VT) was initiated. Vale Transporte is a program requiring employers to provide their formal employees with a transport voucher that covers the share of total public transport commuting costs exceeding 6% of base salaries. Employers receive an income tax deduction equivalent to the value of the voucher (although a recent controversial measure aims at eliminating this tax deduction). Overall, between 45-50% of the users of public transport use the VT. While intended to target the urban low-income users for their transport needs, *Vale Transporte* benefits only formal sector employees and thus misses the majority of poor workers found in the informal sector. As a result, VT beneficiaries come mostly from the sec-



ond to fourth quintile (see Figure 43). However, due to the variable value of the voucher, benefits are concentrated in the second to fifth quintile (see Figure 44). Moreover, VT vouchers are often traded in informal markets. This trading allows benefits to accrue to higher income employees who commute in their own vehicles and permit their use in the informal transport sector. Ongoing initiatives aim at eliminating loopholes and introducing a smart card that would hinder the informal trade of vouchers.

240. The VT voucher system of transport funding is clearly superior to a supply-side subsidy. However, the VT system contributes to the rigid structure of mandated employment benefits (discussed in the labor section of this report) and thus contributes to high labor informality. More fundamental reforms, beyond the contemplated improvements in targeting and the introduction of smart cards, should therefore be considered. Subject to detailed study and evaluation, it might be preferable to convert the VT into a component of cash salary. This would increase consumer choice without causing the income shock that would result from a simple elimination of the program.

241. **Implications.** Initiatives to improve access of the poor to efficient urban transport services should include: (a) efforts to improve fare and schedule integration among different urban transport operators; (b) paving of streets in low-income areas and favelas to provide all-weather access to formal or informal services; (c) use of

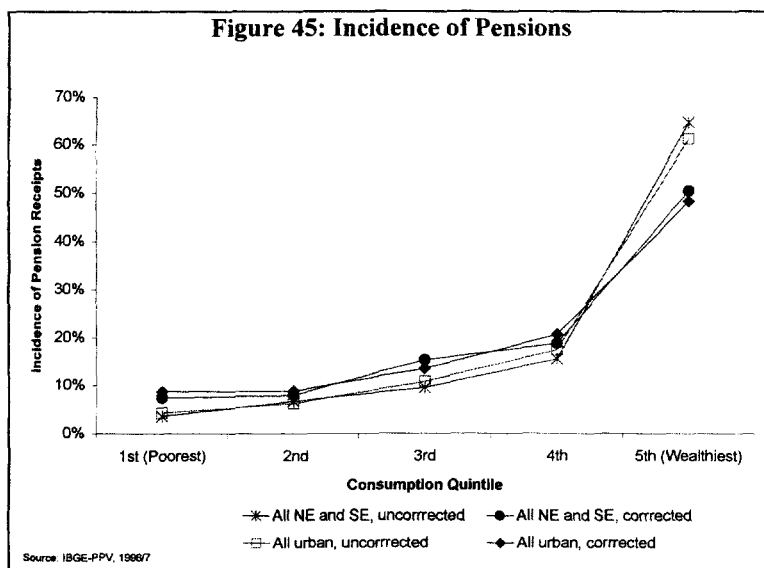
non-motorized transport, particularly bicycles wherever applicable, to facilitate access to bus trunk lines and trains; (d) regularization of informal transport in small and medium-size communities to increase the supply of services (e) regularization of informal transport in major cities for areas not served by the formal sector; (f) diversification of the vehicle fleet of formal operators to include minibuses and vans to better serve poor communities; and (g) rehabilitation/improvements of suburban train systems that serve poor neighborhoods and poor riders.

situations of chronically low income for households that are not otherwise covered by social safety net programs.

Pension and Related Benefits

244. Pensions under the regular and special regimes likely constitute the most important part of Brazil's social safety net. Various studies have shown that poverty rates might be as much as 50% higher in the absence of pension benefits currently received by households around the poverty line (World Bank 1998a and Rocha 1998). However, despite the importance of pensions for the poor or near-poor, the pension system is not

245. The PPV allows for analysis of the incidence of pensions as a whole but does not permit the distinction between different pension regimes. Since pensions can constitute a large proportion of household income, one important issue in the analysis of the incidence of transfer programs is the treatment of transfer payments in the construction of consumption quintiles. Two alternative approaches are followed in this report. First, consumption quintiles are based on actual observed consumption (uncorrected quintiles). This approach does not consider that consumption of beneficiaries would likely have been less if they had not received the benefit. Incidence analysis following this approach may make a program look relatively regressive exactly because it succeeds in lifting people out of poverty. To overcome this problem, corrected consumption quintiles were constructed by replacing consumption of beneficiary households by an estimate of consumption in the absence of the program.²⁴



a well targeted instrument of social policy. Since pensions are a social insurance system with benefits related to previous salary levels, this is neither unexpected nor—if benefits were all contribution funded—undesirable. The problem is that the current social security system depends on large budgetary transfers, thus greatly increasing the regressiveness of Government social spending. Pension reform is a critical part of the Government's overall fiscal adjustment program.²³

246. The coverage of the population with pension benefits rises from 8% in the first (corrected) quintile to 16% for the highest quintile. As expected for a program whose benefit levels are based on previous salaries, the incidence of benefits is highly regressive with more than 50% of the benefit accruing to the top quintile and only 7% reaching the bottom quintile (see Figure 45).

247. Within the broader pension system, two programs comprise an explicit part of the social safety net. Retirees in rural areas receive a guaranteed minimum pension of one minimum salary regardless of the

²³ For a comprehensive discussion of overall pension reform see the World Bank Pension Report.

²⁴ Consumption in the absence of the program was calculated by estimating the coefficient that transforms income to consumption for different types of household and applying this coefficient to the reduction in income resulting from the elimination of transfer payments.

Table 22: Number of New Social Assistance Benefits

Year	RMV	LOAS
1990	85 143	-
1991	71 530	-
1992	61 925	-
1993	82 419	-
1994	70 725	-
1995	53 200	-
1996	16 798	385 068
1997	4 806	310 451

Source: *Anuário Estatístico da Previdência*, 1992, 1995, 1996, 1997.

amount of their contributions. This program is arguably the most significant pillar of the social safety net in rural areas. About 5.5 million individuals receive rural pensions at an annual cost of about R\$9.8 billion.

248. The second special program is a basic pension for elderly and disabled persons. Until 1996, individuals 70 years and older as well as the disabled without income or other means to provide their own support could claim a special lifelong pension equivalent to half a minimum salary, *Renda Mensal Vitalícia* (RMV). Following a constitutional mandate, benefit levels have been increased in 1991 to one minimum salary. In December 1997, the stock of beneficiaries was 660,000 of which 63% were disabled. The annual cost is in the R\$800 million range and will decline over time.

249. For new entrants, RMV is being replaced by a similar social assistance program. The new program, *Benefício de Prestação Continuada* (BPC), which was established by the *Lei Orgânica da Assistência Social* (LOAS) in 1993 provides a benefit of one minimum wage for the disabled and elderly with a maximum per capita family income of one-quarter of the minimum

salary. In contrast to RMV, this program establishes a legal entitlement to the benefit. BPC is explicitly funded from the Treasury rather than from general pension contributions. In December 1997, the program served 670,000 beneficiaries, of which 86% were disabled, at an annual cost of R\$800 million. The 1999 budget proposal provides for R\$1.1 billion. Enrollment and costs continue to increase albeit at a slower rate than during the initial years of the program.

250. Data on the number of new benefits in the first years of BPC show a significant increase compared to RMV (Table 22). Data also show an imbalance between the number of old age and disabled benefit concessions: old age benefits, which represented approximately one-third of RMV benefit concessions, corresponded to only 9% of new BPC benefits in December 1996 (see Table 22). By mid-1997 it was obvious that procedures for new benefit concessions were too loose and fraud had become widespread. Despite recent tightening of eligibility requirements and audits, it is likely that there is still a significant number of ineligible beneficiaries in the program.

251. Enforcement of program eligibility

Table 23: Percent Shares of Old Age and Disability Benefit Concession

Year	RMV		LOAS	
	Old Age	Disability	Old Age	Disability
1990	46.74	53.26	-	-
1991	43.57	56.43	-	-
1992	41.39	58.61	-	-
1993	44.78	55.22	-	-
1994	42.87	57.13	-	-
1995	43.67	56.33	-	-
1996	29.96	70.04	11.91	88.09
1997	28.13	71.87	16.03	83.97

Source: *Anuário Estatístico da Previdência*, 1992, 1995, 1996, 1997.

requirements is complicated by the large number of individuals (judges, educational professionals, civil servants, elected officials, priests) qualified for declaring eligibility. Moreover, the central database does not include recipients' characteristics that would permit an evaluation or verification with other Government databases. In order to reduce cases of misuse, a medical declaration from an INSS certified physician is now required in the case of claiming disability benefits.

252. While there are no data that permit the analysis of actual targeting of RMV/BPC benefits, analysis of PNAD data shows that social assistance benefits under the LOAS have already attained a number of recipients similar to the estimated number of individuals satisfying the eligibility requirements. However, given the loose procedures for benefit concession and lack of control through compatible central databases, it is likely that a significant share of beneficiaries does not meet the eligibility criteria and a similar number of eligible individuals are not reached by the program.

Unemployment Programs and *Abono Salarial*

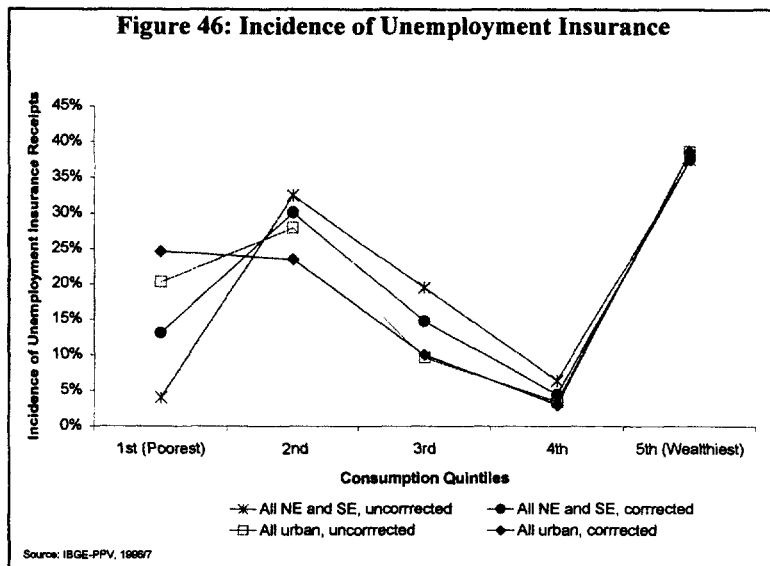
253. Formal sector employees enjoy the benefits of an unemployment compensation system funded through FAT.²⁵ After 6 months of employment, the system provides three to five payments during the first year of unemployment. The benefit can be repeated after 16 months. In 1997, the system disbursed R\$3.5 billion for 4.4 million insured unemployed. 18.7 million compensation payments (4.3 per beneficiary) were made at an average amount of 1.57 minimum salaries (about R\$185 per payment).

²⁵ Further discussion of the unemployment insurance program can be found in World Bank (2000c).

For 1998, the program is budgeted with R\$4.7 billion. To buffer the expected unemployment effect of the 1998-99 crisis, the Government decided to grant three additional payments between the twelfth and eighteenth month of unemployment in the metropolitan areas.

254. The poverty profile shows that almost half of the unemployed (those seeking but not finding work in the reference period) fall below the poverty line. This would seem to suggest that a large share of unemployment insurance benefits accrue to the poor. This assumption, however, is not true. Since unemployment insurance is available only to

Figure 46: Incidence of Unemployment Insurance

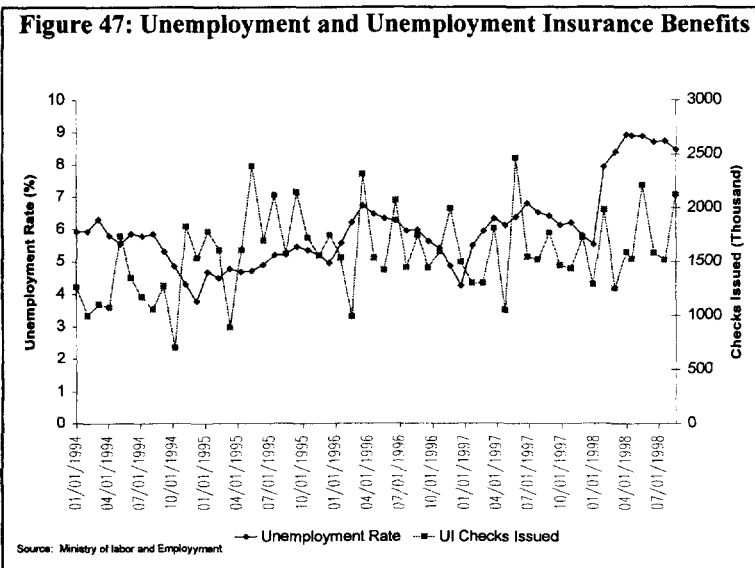


those employed in the formal sector, the system benefits only the relatively higher income groups among the unemployed. The incidence of the benefit amount is concentrated in the second and fifth quintile with the first quintile receiving only 4% (uncorrected) or 13% (corrected) of the benefit (Figure 46). While the concentration of benefits in the second quintile appears plausible (few workers in the first quintile are formal and thus eligible), the concentration in the fifth quintile deserves more detailed analysis. While this could indicate problems in the benefit administration, it could also be an artifact of statistical insignificance due to the very small number of occurrences of the

benefit within the PPV sample. The coverage of unemployment is less than 1% for all quintiles with highest coverage in the second quintile. Other recent analysis (IPEA 2000) shows a higher incidence (23%) of unemployment insurance for the bottom 25% but confirms the concentration of the benefits above the poverty line (in this case in the third quintile).

255. To the extent that unemployment insurance is a social insurance program funded through a special contribution from employers (PIS/PASEP), poor social targeting is not problematic *per-se*. However, in its current form, unemployment insurance should not

256. Interestingly, unemployment rates do not explain either the number of beneficiaries or the actual number of unemployment compensation payments issued (Figure 47). While unemployment rates have changed significantly over the last four years, there has been far less fluctuation in the benefits granted. While requiring further investigation, this finding appears to be due to significant bureaucratic access barriers to the benefit. The main implication is that the program may not function as an effective counter-cyclical program that would automatically respond to increased demand and provide protection from the adverse impacts of formal sector unemployment.



be misunderstood as an effective poverty-fighting program. More problematic is the overlap of unemployment insurance benefits with benefits from the severance fund (FGTS). The large combined benefits in case of dismissal from a formal sector job are likely to contribute to inefficiently high turnover of workers and other labor market distortions. While better coordination between unemployment insurance, training, and labor market intermediation is being pursued by the Government, further reforms should target integration or better alignment of unemployment insurance and severance fund (see paragraph 126).

257. FAT also funds an annual payment of one monthly minimum salary for formal sector employees who earn up to two minimum salaries (*Abono Salarial*). In 1997, the Government spent R\$615 million on this benefit for about 4.5 million workers. The fixed benefit amount implies progressivity among beneficiaries. However, the requirement of formal employment means inferior targeting from a poverty-reduction perspective and should be rethought. Evidence of the incidence of the

Abono Salarial is available from the PNAD 1997 (IPEA 2000). Benefits are concentrated in the third and fourth quintile. About 10% of the beneficiaries come from the lowest 18% of the population (using an indigence line slightly lower than the extreme poverty line of this report). 36% of beneficiaries come from the lowest 39% of the population. While the *Abono* is certainly an important contribution to the income of beneficiaries, there is no clear rationale for this program, and if hard choices about spending priorities have to be made, it could be phased out with its resources reassigned to better targeted social spending.

Table 24: Targeting of *Bolsa Escola*

	Program Beneficiaries	PNAD Control Group
Average Family Income (R\$)	175.4	180.4
Average Per Capita Income (R\$)	36.3	43.2
Average Family Size	4.8	4.2
Gap Ratio	0.45	0.35

Source: IBGE/PNAD, 1995; School Scholarship (Paranoá Registry)

Bolsa Escola Programs

258. *Bolsa Escola* is the best known of several subnational programs linking transfer payments to poor families with the school attendance of their children. *Bolsa Escola* was created in 1995 in Brasília and is a minimum income program focused on education (World Bank 2000b). To receive the benefit of one minimum salary, a family with children of ages 7 to 14 should have them enrolled in a public school, have been residents of the Federal District for five consecutive years, have a family per capita income of up to one-half of the minimum salary, and be enrolled in the Federal District's employment search program.²⁶ The assistance is provided for a period of 12 months, with the possibility of renewal for one further year. Payment is suspended whenever children have more than two days of unexplained absence from school within a one-month period. Program administration is linked to the school in which the children are enrolled. Coverage of the program increased from 5,600 families in 1995 to 19,400 families in 1996 and 22,000 families in 1997. The objective is to assist 25,000 families in 1998 and 35,000 in 1999. The program as it has been implemented to date is being considered a success in relation to family selection, coverage, and targeting.

259. Given the difficulties of proving income when a significant part of family income is derived from informal occupations, the program adopted a quasi-means testing system for determining eligibility. Household characteristics are assessed through a points system at the time of enrollment and verified on a subsequent visit to the family home. Points are based on participation in the labor market, characteristics of the

home, other assets, number of dependents, and risk factors, among others. Families that exceed a certain level of points are selected for the program.

260. Targeting of the program has been evaluated through a comparison of the characteristics of program beneficiaries in Paranoá (based on the program register) and a reference population selected from the PNAD based on the program eligibility criteria (income, presence of children between 7 and 14 years old, and time of residence in the Federal District). The results confirm successful targeting and similar characteristics between the program beneficiaries (Table 24). Assuming that the program register data are correct, the analysis shows that program beneficiaries are actually poorer than the control group selected on the basis of program eligibility criteria (Sabóia and Rocha 1998).

261. Mandatory school attendance as a condition for obtaining program benefits aims at altering the demand for education among the poor. School registries indicate a marked improvement in school attendance levels. The reduction in the repetition rates (where children are forced to repeat a grade due to sub-par performance) is more significant among beneficiaries than among non-beneficiaries. A representative sample of students who were tested by SAEB in Brasília indicates that there is no statistically significant difference between the scores obtained by beneficiaries and non-beneficiaries. A rigorous evaluation would require comparison with a control group with the same characteristics. However, it is almost certain that the beneficiary group possesses characteristics less favorable for educational outcomes. The test results are therefore tentative indicators of the pro-

²⁶ This last requirement was never effectively implemented.

gram's success in terms of educational impact.

262. The positive program results are due to rigorous control of all stages of program implementation and the particular characteristics of Brasília, which are favorable to the implementation of such a program. Brasília has low poverty rates, high average income, strong spatial separation between rich and poor, adequate provision of public services, and a government with financial and administrative capacity compatible with the requirements of the program.

263. Using a mechanism similar to *Bolsa Escola*, the Federal Government started in 1996 a new initiative to eradicate child labor. The program (*Programa de Erradicação do Trabalho Infantil, PETI*), funded with R\$25 million in 1998, provides a family support payment (*Bolsa Criança*) of up to R\$50 per child per month for families who take their 7 to 14 year old children out of the workplace and put them back in school. Municipalities receive an additional payment for tutoring, feeding, and recreation services for the same group of children. The program is heavily focused on the Northeast. This program is apparently well implemented, successful in the attainment of its specific objective, and is presently being expanded. The 1999 budget proposal includes R\$30 million for this initiative.

264. Congress recently approved a law authorizing federal co-financing of municipal minimum income programs that are tied to school attendance (*Programa de Garantia de Renda Mínima*). For municipalities poorer than the respective state average, the federal government pays up to 50% of programs that provide a support payment (*Bolsa Escola*) to low-income families who maintain all their children in school. This program is modeled on the *Bolsa Escola* program in Brasília and several municipalities around the country. This program is administered by the Ministry of Education. In 1999, this program reached 500,000 families with per-capita family income of less than one-half of the minimum wage (similar to

the poverty line used for the purposes of this report). The program transferred R\$226.6 million of federal resources to 1,005 municipalities. Currently a further major expansion of this program is underway. It is estimated that, when fully implemented, the program would reach three million families at a cost of R\$1.5 billion.

Workfare

265. Brazil has acquired a rich experience in the use of workfare programs to fight the devastating effects of periodic droughts in the rural Northeast. In 1998-99 for example, the Government spent over one billion *Reais* on workfare programs to compensate for the income loss resulting from drought effects. While a program of this scale cannot be without problems, it has overall been considered effective and relatively efficient in achieving its objectives. In urban areas, several municipalities and some states have created workfare programs in the expectation of a major economic downturn in 1999. Benefit levels have often been quite generous (wages above the minimum wage plus transportation, food, and insurance). In general, the targeting and fiscal effects of these programs could be improved by lowering benefit levels below market wages for unskilled workers (while this may be above the minimum wage in the wealthier parts of the country, it would probably require benefit levels below the minimum wage elsewhere).

Nutrition and Other In-Kind Services

266. Malnutrition is the most obvious manifestation of extreme poverty. Thus, food distribution programs have often been the first choice of policy makers. These programs have historically had a central place in anti-poverty policy in Brazil (Table 25) but have also been inefficient because objectives are not clearly defined. Unclear objectives have led to inadequate design and the simultaneous operation of competing programs.

267. The Food Distribution Program (PRODEA) was created in 1993 and is ad-

Table 25: Federal Expenditures on Nutritional Programs 1982-1997 (Thousand RS 1997)

	School Lunch	PSA	PAN	Milk Program	Milk is Health	PRODEA	PAT	Sub-total	All Programs
1982	151 075	60 506	34 461	-	-	-	nd	246 041	377 903
1983	108 934	198 557	42 755	-	-	-	nd	350 246	484 659
1984	150 223	234 448	45 769	-	-	-	nd	430 441	580 331
1985	275 078	292 042	30 100	-	-	-	nd	597 220	838 237
1986	433 212	310 373	66 386	37 253	-	-	nd	847 224	1 146 491
1987	342 560	232 586	128 100	273 574	-	-	nd	976 820	1 244 108
1988	315 383	32 690	178 283	365 235	-	-	nd	891 591	1 126 143
1989	328 681	86 680	155 746	469 908	-	-	nd	1 041 015	1 276 206
1990	382 812	144 140	74 249	636 969	-	-	nd	1 238 170	1 438 832
1991	261 575	60 393	-	6 189	-	-	nd	328 157	1 333 578
1992	138 574	-	-	-	-	-	nd	138 574	350 362
1993	416 936	-	-	-	29 671	18 007	nd	464 615	493 871
1994	nd	-	-	-	nd	nd	nd	nd	nd
1995	581 812	-	-	-	123 94	2 930	70 824	779 511	779 511
1996	403 175	-	-	-	25 925	5 238	71 255	505 593	505 593
1997	597 349	-	-	-	87 187	35 514	71 255*	720 051	791 305

* Information for 1997 not available. Value refers to 1996. For the 1982-1993 period, some information was obtained from the World Bank (1996, page 15).

ministered by the Ministry of Agriculture. Its original aim was to provide food baskets to be distributed among families affected by emergencies such as droughts and floods. In order to minimize patronage and intermediary costs, the program was designed to operate with major participation of the civil society (citizen committees are in charge of selecting beneficiaries) and in cooperation with local governments (state and local governments transport goods between distribution centers and municipalities). Food was originally obtained from federal government regulatory stockpiles, but in 1997, 24% of the food was acquired from rural producers or the market.

268. The Hunger Map (*Mapa da Fome*) served as the basis for identifying the most needy municipalities and establishing the number of families to be assisted (Peliano 1993). In 1997, 14.8 million food baskets of 25 kilograms were distributed at an estimated cost of R\$11 each, which, according to government estimates, is 40% below market cost (Comunidade Solidária). Total cost reached R\$160 million in 1997, with operational costs accounting for 6.75% of the total. Northeastern municipalities corresponded to 37% (501) of those selected, but, sensibly, concentrated most of the benefits. In Northeastern municipalities, PRODEA assisted 53% of families and distributed 50% of the total number of food baskets; thus approximately 7.4 baskets were distrib-

uted per family per year in Northeastern urban areas.

269. Due to the informal procedures adopted for selection and distribution of food baskets, beneficiary registries record only name and address but do not permit evaluation of targeting or nutritional impact. There is no mechanism to avoid that expansion of PRODEA overlaps with competing nutrition programs anchored in the health and educational systems.

270. The school lunch program (*Merenda Escolar*) is the largest nutrition program. The program is administered by the Ministry of Education and corresponds to roughly 25% of total expenditures under the *Comunidade Solidária* Program. After losses and irregularities in central procurement, the program has decentralized the acquisition, preparation, and distribution of school lunches to school personnel. The program has shown a remarkable continuity despite problems in terms of financing, operation, and administration. The program expanded the number of beneficiaries continuously from 15.0 million in 1980 to 35.3 million in 1997. Resources, previously transferred from the Ministry of Education to municipalities then to schools, are gradually being directly transferred to schools on the basis of enrollment (R\$0.13 per meal) thus avoiding unnecessary intermediaries, inevitable delays, and political interference. The gov-

ernment supports poor municipalities by increasing transfers by an additional R\$0.06 per meal.

271. Free school meal programs reach about 60% of students from the first three quintiles (see Figure 48). The incidence is closely related to the income distribution of children in public schools at different levels. The incidence is progressive with about 25% each accruing for the first three quintiles. The program is concentrated at the pre-school and primary education level where it is highly progressive. Corresponding to low participation of the poor in secondary education, only 5% of school meals at secondary schools accrues to the first quintile (see Figure 49).

272. Programs for the distribution of free milk achieve highest coverage among the second quintile with almost 15% receiving milk. The incidence is heavily concentrated in the first (28%) and second (33%) quintiles (see Figure 50). In 1994, a new milk distribution program (*Milk is Health*) was created with a design intended to avoid critical shortcomings in targeting, monitor-

ing and evaluation of previous programs. The program is targeted at children (from six months to two years) and pregnant

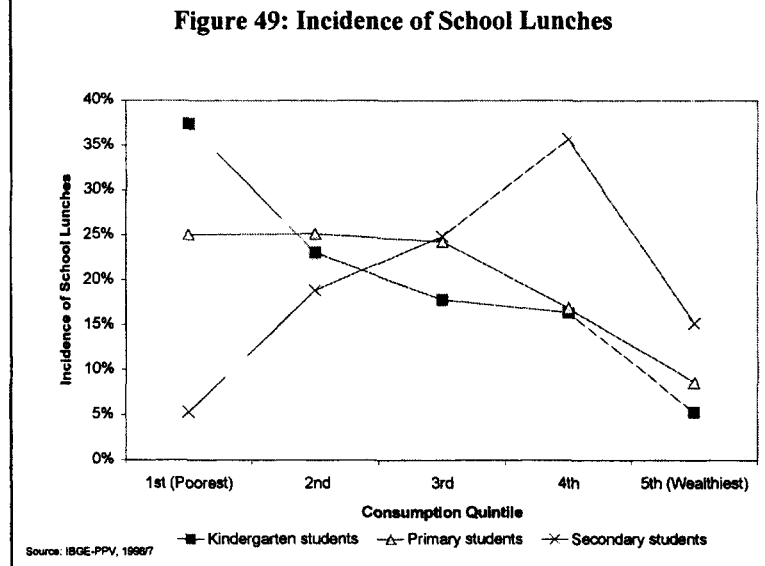
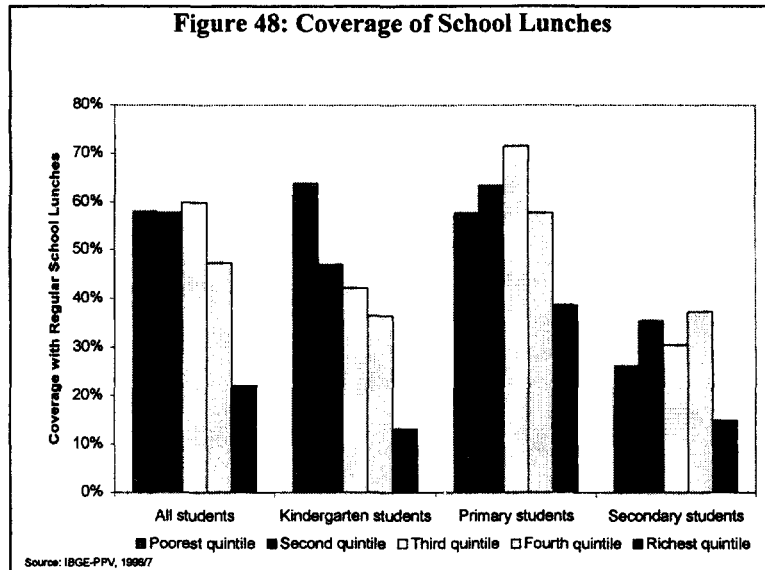


Table 26: Workers Food Program (PAT) - Indicators of Regional Unbalance

	Brazil		Northeast		NE / BR	
	1988	1996	1988	1996	1988	1996
No. of participating enterprises*	8,410	4,252	715	341	0.09	0.08
No. of workers benefited (thousand)	4,410	8,181	322	786	0.07	0.10
No. of formal employees (thousand)	22,778	20,760	3,583	3,217	0.16	0.15
% workers benefited/formal employees	19.36	39.41	8.99	24.44	-	-
No. of employees (thousand)	38,803	41,077	8,793	9,090	0.23	0.22
% workers benefited/employees	11.37	19.92	3.66	8.65	-	-
No. of workers (thousand)	58,729	68,040	15,790	19,194	0.27	0.28
% workers benefited/workers	7.51	12.02	2.04	4.10	-	-
Fiscal incentive (R\$ thousand)*	21,625	72,798	1,544	3,811	0.07	0.05
Fiscal incentive per worker (R\$)*	5.99	9.81	2.55	5.31	0.43	0.54

Source: IBGE/PNADs 1988 and 1996; Ministério do Trabalho (*) 1990 and 1994.

women under nutritional risk. The target population is selected in health centers. The program is decentralized, and federal resources from the Ministry of Health are transferred to each municipality on the basis of population size and estimates of child malnutrition. The number of municipalities participating in the program is increasing (587 in 1996; 999 in 1997), however, fluctuations in resources from year to year (R\$ 139.6 million in 1995, R\$ 29.2 million in 1996, R\$ 98.2 million in 1997) and interruptions in the transfer of resources has been a major problem.

273. The Workers Food Program (PAT), created in 1976 under the Ministry of Labor, is intended to improve workers' nutritional conditions and, thus, reduce work accidents and improve labor productivity. The program was originally targeted at formal employees receiving up to five minimum wages. In 1991 the benefit was extended to all formal workers independently of their wages. Participating enterprises receive an income tax credit corresponding to twice the value of expenditures under the program and limited to 5% of income taxes. Expenditures may correspond to meals served at the workplace, meal or food tickets, or food baskets.

274. PAT benefits workers in the formal sector who are already better protected in terms of benefits and wages. PAT uses resources that could be better targeted to the poorest. Moreover, PAT increases inequality between workers in the formal and informal sectors. Although data on income distribution for those benefited is not available, it seems clear that resources under this program are not effectively targeted to the poor. As shown in Table 26, the Northeast gets the lowest share of benefits, even lower than its participation in formal employment. A possible explanation is that enterprises in the Northeast have no incentive to participate when they are exempt from income tax

under regional investment incentive schemes.

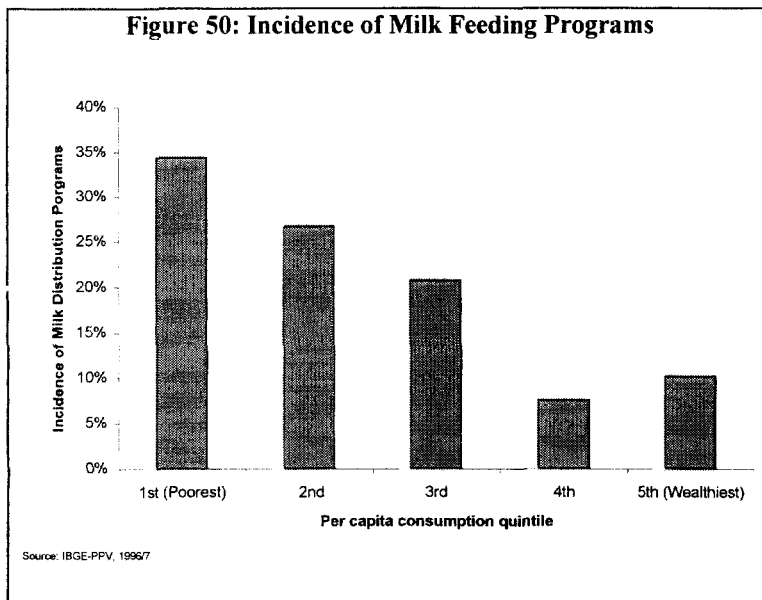
275. Special programs supporting children (0-6 years), adolescents (7-14 years), the elderly, and the disabled were in the past directly implemented by a federal agency (*Legião Brasileira de Assistência - LBA*). In order to improve efficiency of resource use, LBA has been abolished, and federal resources are now channeled through a National Social Assistance Fund to states and municipalities that often include NGOs in the implementation of these support programs. These programs currently benefit about 260,000 elderly, 1.5 million children, 430,000 adolescents, and 120,000 disabled, with a total budget of R\$430 million in 1998. These programs are loosely targeted at families with a per capita income less than half of the minimum salary. There continues to be significant scope for making the administration more efficient, as well as improving the targeting and cost effectiveness of these programs. Federal funding is expected to decline as states and municipalities increase their funding shares. The 1999 budget proposal includes R\$337 million for these programs.

Comunidade Solidaria

276. The Government has created *Comunidade Solidaria* as a new approach to increase the efficiency and effectiveness of social assistance programs. Explicitly avoiding the creation of a new bureaucracy and operating with a small coordinating staff linked to the Presidency, the program aims to integrate government action at all levels, emphasizing local implementation with the support of the civil society. The idea of *Comunidade Solidaria* is to coordinate the actions of different actors toward the objective of supporting the most vulnerable individuals. Although the adoption of this operational framework intends to solve some critical problems of social program operation in Brazil, many difficulties still remain.

277. Municipalities under the most critical conditions were selected for the program's integrated action. Making social policy priorities operational in the selected municipalities is particularly difficult for the same reasons they were selected: resources are scarce; the public administration is unequipped and thus unable to operate as a counterpart to federal and state agencies; the population is mostly poor and thus solidarity from the non-poor has a very limited impact; the level of social organization is low; and patronage as a political practice is frequent while civic pride wanes.

278. Table 27 summarizes the application



of resources on priority programs under *Comunidade Solidaria*. Some of the programs are not targeted at the poor like those programs under the Ministry of Education and Ministry of Labor. Food and nutrition programs reached one-third of total expenditures in 1997, despite the exclusion of the PAT, which is notoriously poorly targeted. PRODEA is intended to be used as an anchor for creating an integrated assistance net for poor families. However, PRODEA is clearly not the best choice to anchor anti-poverty action because of its loose registration procedures and lack of a physical basis.

Reform Agenda

279. Brazil has a large number of social safety net programs that cover a large number of social risks. However, significant gaps remain in the safety net, especially for job or income losses outside of the formal sector and chronically low income for those not in groups targeted by specific support programs. For insurance programs (especially social security) that are intrinsically targeted against the poor, reforms should aim at contributions that cover the full cost. For social assistance programs, reforms should aim at increased targeting toward the poorest and increased operational efficiency.

Both measures increase the share of spending for these programs that benefit the poor.

280. Given fiscal constraints and possible adverse incentive effects, the Government is understandably reluctant to create new safety net programs that do not either focus on emergencies (such as the rural workfare programs in periods of drought) or link transfers to structural social policies dealing with poverty (such as transfer programs linked to school attendance—*Bolsa Escola*).

281. Remaining gaps of the safety net would be filled gradually through refinements and improvements in existing programs. At the same time, ongoing experiments should be carefully evaluated and possibly redesigned to better target the poorest and increase their income security. Evaluation and restructuring of poverty alleviation initiatives should result in better targeted and more efficient programs that provide an escape route from poverty. Further elements possibly requiring evaluation and consideration include a more general minimum income program and insurance pro-

Table 27: *Comunidade Solidária* - Budget Expenditures by Ministries and Programs

Ministries/ Programs	Consolidated Expenditures R\$ Millions		
	1995	1996	1997
I- Ministry of Budget and Planning	0.0	434.7	698.8
"Habitar Brasil"	0.0	199.2	301.5
Sewerage disposal - PASS	0.0	235.5	397.3
II- Ministry of Agriculture	3.3	15.4	110.8
Small scale agriculture -PRONAF	0.0	9.5	70.8
PRODEA	3.3	5.9	40.0
III- Ministry of Education	731.3	562.8	833.8
School Lunch Program	655.3	454.1	672.8
Others	76.0	108.7	161.0
IV- Ministry of Health	199.1	104.6	416.8
Infant malnutrition (inc. Milk Program)	139.6	29.2	98.2
Basic sewerage in the bounds of the PRMI	59.5	54.4	155.8
Others	0.0	21.0	162.8
V- Ministry of Labor	49.5	284.8	387.4
PLANFOR- Professional Training	17.1	257.2	352.1
Job Placement Service	28.0	25.8	33.6
Others	4.4	1.8	1.7
TOTAL in December 1997 prices	1,119.4	1,463.2	2,447.6

Source: *Subsecretaria de Planejamento e Orçamento dos Ministérios.*

grams for workers outside of the formal sector.

282. In the case of nutrition programs linked to the education and health systems as well as the provision of support services for children, the disabled, and the elderly, provision in-kind is likely to improve targeting and effectiveness. However, in the case of broad food distribution programs (like PRODEA), in-kind provision is doubtful. Well targeted cash transfer programs would have lower administrative costs and provide higher benefits for the recipients.

283. Programs for which targeting depends on income are difficult to operate because most of the poor live, totally or partially, on informal income. This underlines the importance of developing quasi-means testing systems for assessing income and neediness on the basis of observable characteristics of a household and its residents. The Chilean CASEN and the Colombian SISBEN systems provide interesting models for such means-testing programs.

284. Using schools and health centers as anchors for policies targeted at the poor presents obvious advantages including the existing operational structure. The benefits associated with social programs may attract a clientele that does not use universal public services such as schools and health centers.

Additionally there is a more stable basis for delimiting the targeted population: school enrollment as well as a visit to the health center creates registers which are needed for selecting and then monitoring the population under poverty alleviation programs. The excellent results with targeting in the *Bolsa Escola* program are due to its link with the public school network and to strict procedures for the selection of families.

285. Program operation and results are often negatively affected by the instability of funding. Even consolidated and successful programs, like the School Lunch Program, are subjected to budget fluctuations. In the case of the *Milk is Health* program, interruptions that may typically last for six months after a nine-month period of program operation, are caused by the arrangements for the flow of funds. If local resources are not available, operation is halted, benefits on children are wasted, and program evaluation is impossible. Table 25 illustrates the large fluctuations in expenditures on nutritional programs over the last fifteen years.

286. A register of the beneficiaries of different social programs would be essential for program operation, selection, monitoring, and evaluation. It would avoid the multiplication of benefits for the better informed at the cost of excluding other beneficiaries.

287. Impact evaluation needs to become an essential and integral part of all social programs. In many cases the program itself must generate the basic information for evaluation, through monitoring systems and

a register of beneficiaries. Household survey data can complement and provide an independent source of data for program evaluation.

4. Poverty Reduction Strategies and Perspectives

288. This section attempts to pull together the themes of this report. It begins with an analysis of Government social spending across different sectors and categories, followed by key elements of a strategy for the fight against poverty. The presentation of alternative poverty reduction scenarios for the year 2015 concludes this section and the

report.

Public Social Spending

289. A large number of Government policies at all levels are in place to fight poverty. No doubt, poverty in Brazil would be much worse without many of the ongoing efforts.

Table 28: Summary of Consolidated Social Spending, 1995 with Updates

	Total Budget Spending (R\$bn/a)	Effective Targeting to bottom 20%*	Total benefits to poor (R\$bn/a)	Budget Spending per Total benefit to Poor
Benchmarks				
General Investment		3%		33.3
Uniform Transfer Payment		20%		6.3
Education				
Creche		24%		4.2
Kindergarten	1.1	42%	0.45	2.4
Basic Education	11.6	26%	3.00	3.8
Secondary Education	1.7	7%	0.13	13.5
University Education	5.1	0%	0.00	
Adult Education/Training	0.4	5%	0.02	22.2
Health Care				
Universal Public Health Care	21.8	21%	4.58	4.8
Urban Investments				
Water Connection	1.4	12%	0.16	8.3
Sewer Connection		4%		25.0
Urban Public Transport	2.6	9%	0.24	11.1
Housing (Carta de Credito)	7.2	2%	0.14	50.0
Favela Upgrading		34%		2.9
Other Social Investments				
Microcredit Programs		20%		5.0
Land Reform	2.0	70%	1.40	1.4
Pension and Related Programs				
Pensions	67.6	7%	4.50	15.0
BPC (LOAS)	1.2	70%	0.76	1.6
Social Assistance Services				
Old Age Services	0.0	50%	0.01	2.5
Disabled Services	0.1	50%	0.02	2.5
Child Services	0.2	42%	0.07	3.0
Subnational Social Assistance Programs	1.9	70%	1.06	1.8
Other Transfer Programs				
Child Labor Eradication	0.1	80%	0.04	1.6
Minimum Income Programs (subnational)	0.0	70%	0.01	1.8
Nutrition Programs				
Food Baskets (PRODEA)	0.2	80%	0.10	1.6
School Lunches	0.7	25%	0.14	5.0
Maternal Nutrition (Milk Programs)	0.1	29%	0.03	4.3
Labor Programs				
Unemployment Insurance	3.0	13%	0.32	9.5
Severance Payments (FGTS)**		13%		9.6
Abono Salarial	0.6	13%	0.06	9.6
Others				
Drought Workfare (in drought years)	1.2	70%	0.76	1.6
Summary/Total	131.8	14%	18.00	

* Targeting numbers in *italics* are staff estimates, not based on household surveys

** No budgetary spending

Sources: IPEA, Fernandes et.al., World Bank staff estimates, includes updates to reflect more recent program changes.

The wealth of experiences of poverty reduction policies in all sectors and at all levels provide great learning opportunities. The existing experience and the many efforts ongoing also suggest humility when it comes to suggesting simplistic solutions to Brazil's remaining poverty problems. Nevertheless, this report attempts to show that there are many steps that the federal, state, and municipal governments can take to improve public policies and increase their impact on poverty reduction without greatly expanding social spending.

290. An important new development on targeted social policies and social spending, not reflected in the following analysis, has been the creation of the *Projeto Alvorada* by the President in mid 2000. This program encompasses spending of about R\$13.8bn during 2000-2002 for 17 social programs. Most of the spending is directed at poor microregions within the 14 states with the lowest Human Development Index. Out of the total R\$13.8bn, R\$5.8bn were already included in the original budget plan/PPA, R\$2.3bn are new regular budget funds, R\$1.1bn are World Bank and IDB loans including their state counterparts, and R\$4.6bn are resources from a newly created poverty reduction fund. This poverty reduction fund was approved by Congress in December 2000 and is financed primarily from an increase in the financial transactions tax. The *Projeto Alvorada* program is guided by the principle of better poverty targeting of social spending at both the geographic and the household level and the improved coordination and integration of social programs across sectors. As such, the program potentially addresses two of the main shortcomings of social policies in Brazil to date.

291. The largest increase in funding from the *Projeto Alvorada* goes to income transfer programs linked to school attendance ("*Bolsa Escola*"). Brazil has for some time now experimented with different *Bolsa Escola* programs. While design details differ, these programs have in common a cash transfer to families with regular school attendance by their school age children.

These programs have been assessed by the Bank and other organizations and found to provide effective incentives for school attendance and effectively reduce income poverty. These demand-oriented programs complement the continuing Government effort directed at improved quality of the basic education supply. *Projeto Alvorada* now permits a massive expansion of *Bolsa Escola* programs to approximately 10.7 million children. If well implemented, this expansion could mean one of the most important recent advances in social policies in Brazil.

292. This section attempts to combine the incidence data from the PPV with actual social spending data for Brazil in order to create a picture of the overall targeting of social spending. The incidence data is taken from the analysis for this report. For social spending items which cannot be directly analyzed with the PPV, assumptions on targeting were made on the basis of program evaluation studies, introducing additional uncertainty in the aggregate estimates. Social spending data is obtained from a series of studies undertaken by IPEA and refer to consolidated spending in 1995, and/or federal social spending in 1997, with some updating undertaken to reflect recent program changes (Fernandez, et. al. 1998a-c). The combination of the incidence and spending data introduces a series of complications and requires several strong assumptions. As a result, the following analysis should be viewed as highly tentative. It should provide stimulation for more detailed investigation along the lines proposed rather than be taken as a definitive judgement about the incidence of social spending in Brazil.

293. Table 28 summarizes the main items of consolidated social spending in Brazil in 1995. The overview shows social spending of approximately R\$132 billion, of which R\$ 68 billion refer to social security and public service benefits. Of this spending, R\$18 billion or 14% accrue to the first quintile. These benefits to the poor can be divided into cash (R\$6.5 billion) and in-kind benefits (R\$11.5 billion). Benefits include

those accruing immediately (transfer programs) or over the lifetime of beneficiaries (education). Excluding social security and related items, social spending amounts to R\$64 billion, of which about R\$13.5 billion (or 21%) accrues to the first quintile. Putting these spending figures into perspective, the aggregate income gap of Brazil's poor was earlier estimated as R\$12 billion in 1996.

targeting of federal social spending in 1997. The chart excludes subnational spending, which is significant especially for education and health. The full box of the chart represents the size of federal social spending (R\$111 billion). Each horizontal slice represents a different category of spending, ordered by the targeting ratio (share of spending accruing to the bottom quintile). For each slice, the shaded area shows the share of spending in a particular category that accrues to the bottom quintile of the

294. Figure 51 shows the structure and

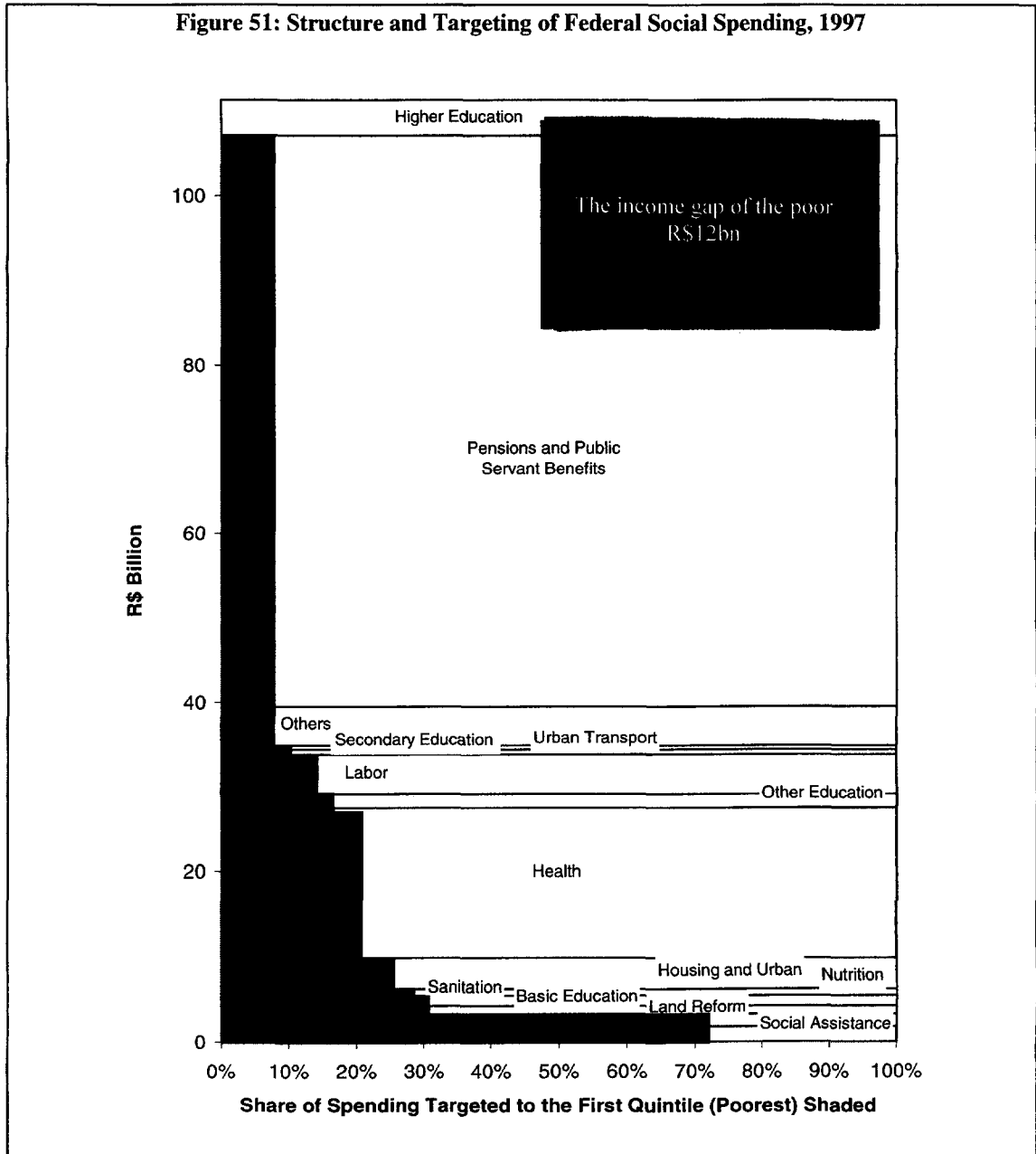
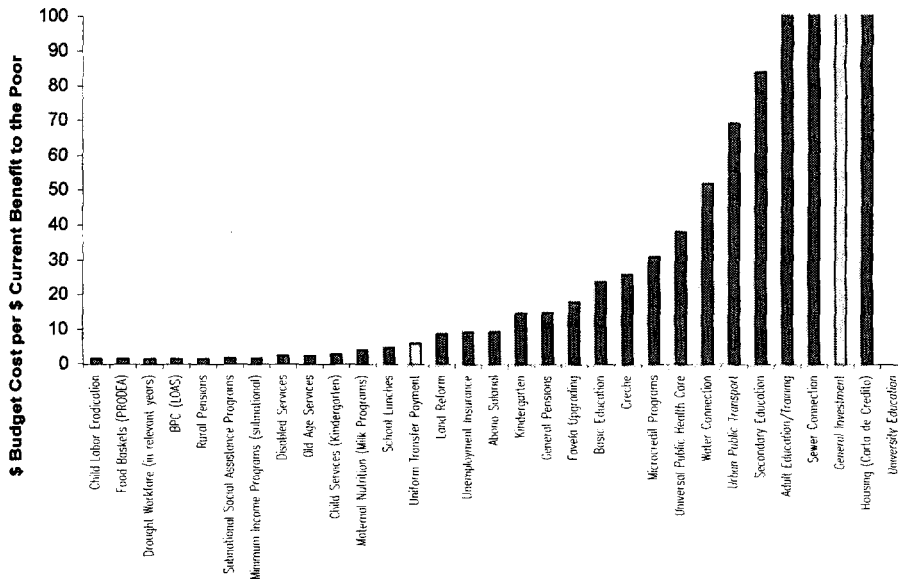
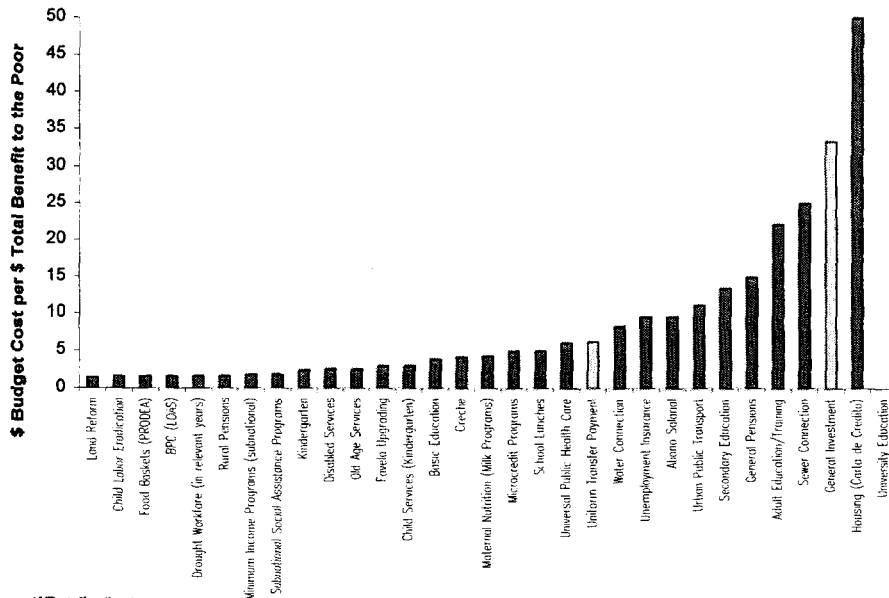


Figure 52: Budget Spending per Current Benefit to the Poor



Source: WB staff estimates

Figure 53: Budget Spending per Total Benefit to the Poor

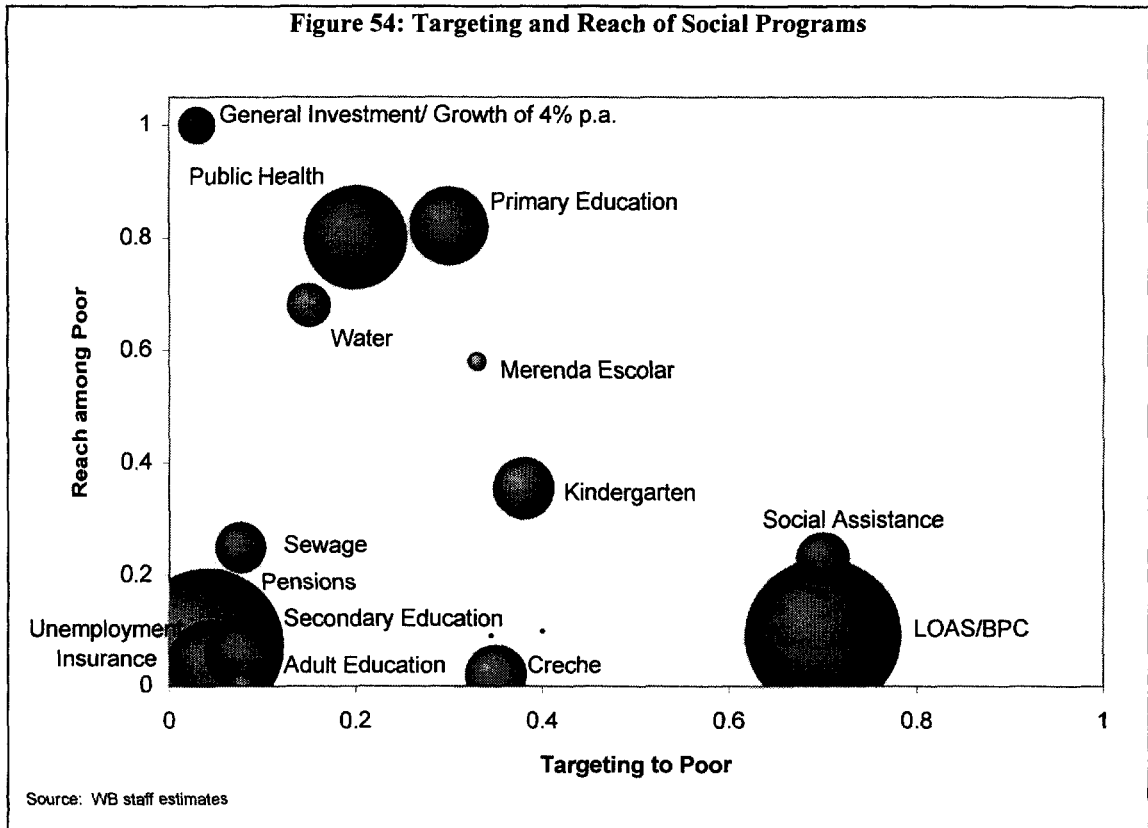


Source: WB staff estimates

population. The total shaded area in the chart therefore represents the share of total federal social spending that accrues to the bottom quintile.

295. In order to arrive at crude estimates of the benefits generated for the poor from this spending, it is assumed that investment pro-

grams generally (and unless more specific data is available) have a benefit-cost ratio of 1, while different transfer programs have a benefit-cost ratio of 0.8 or 0.9, reflecting different levels of administrative costs. In addition, the immediate benefits (transfer programs) are separated from those which accrue as a benefit stream over an extended



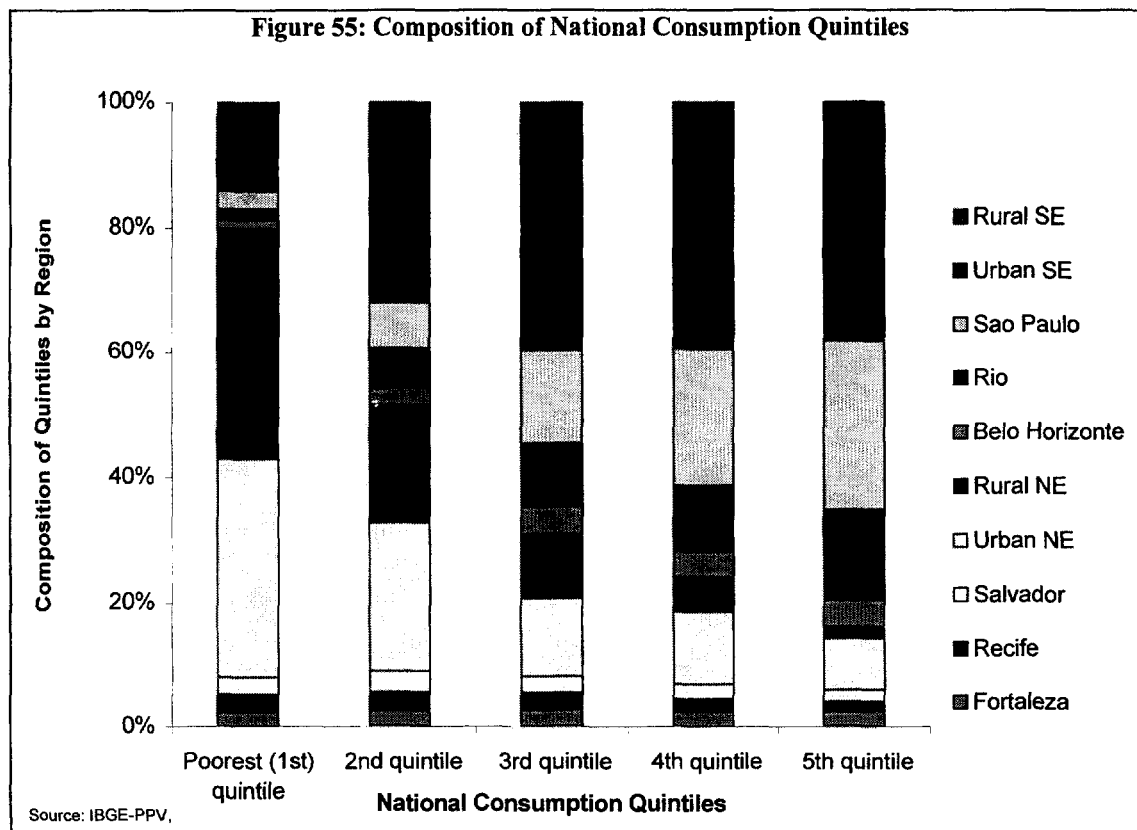
period of time (education) and other investments.

296. Table 28 includes two indicators of targeting effectiveness for each program. The first indicator is the budgetary cost per current benefit to the poor. The second indicator is the budgetary cost of total transfers to the poor. The latter indicator is calculated as the inverse of the benefit cost ratio times the targeting ratio. For the comparison of budgetary cost per current transfer, the benefit cost ratio is replaced by the ratio of current benefits to costs (benefits accruing within one year). As a reference, Table 28 also includes two benchmarks that are hypothetical and do not refer to actual social programs. The first benchmark is general productive investment in the economy generating a market rate of return and assuming a distribution of returns proportional to Brazil's income distribution. The second benchmark is a hypothetical universal transfer program that would distribute an equal cash amount to every Brazilian (poor

or non-poor) at an administrative cost of 20%.

297. If a program does not meet this benchmark, it would be better for the poor if program resources were instead invested productively elsewhere in the economy. The cost-effectiveness indicator for the latter is R\$5 per R\$1 transferred to the bottom quintile.

298. Figure 52 and Figure 53 rank a large number of social programs according to the two cost effectiveness indicators for transferring either current or total (discounted over the lifetime of beneficiaries) benefits to the bottom quintile. Theoretically, the ranking of Figure 53 should guide resource allocation if the only objective of all these programs was long-term poverty reduction. If the objective was immediate transfer to the poor (such as in case of an emergency situation), the ranking of Figure 52 should guide resource allocation.



299. Figure 54 graphically compares programs along three dimensions: each bubble represents one spending program; the size of each bubble is proportional to annual per household spending (annualized in the case of investment programs) showing the relative importance of the program to beneficiaries; the horizontal position of the bubble shows the level of targeting of the program to the bottom quintile; the vertical position of the bubble shows the reach (coverage) of the program among the bottom quintile. Programs in the lower left corner are poorly targeted and do not reach many of the poor. The largest of these are pensions, unemployment insurance, sewage provision, and secondary education. Programs in the bottom right corner are those well-targeted but only reaching a small share of the poor (typically social assistance programs). Programs near the top left are universal programs, especially water and public health. Public pre-primary and primary education is better targeted but reach differs by level. For reference, the impact of distributionally-

neutral, annual growth of 4% is shown in the top left corner.

300. The analysis presented in Figure 52, Figure 53, and Figure 54 is instructive and permits the quantitative comparison of a wide range of very diverse social programs. However, several limitations need to be considered before drawing simplistic and premature policy conclusions from this analysis. These limitations imply that the analysis cannot be used as a direct guide to resource allocation but as a departure point for further in-depth analysis.

- (a) The analysis ranks program by their effectiveness to transfer resources to the poor. However, many of the analyzed programs have additional objectives that need to be considered in a more comprehensive evaluation. For example, programs such as social security and unemployment insurance have an insurance function independent of their social objectives. Many investment programs also have a growth objective.

(b) For several programs, non-monetary benefits for the poor are difficult to measure. Therefore, the assumed benefit-cost ratio may well underestimate benefits of several programs.

cost-effectiveness test from a pure poverty reduction perspective, they should be justified on grounds not captured in this analysis.

(c) Targeting typically refers to average spending in the recent past. New and additional spending may, however, have a different incidence. For example, the average targeting of sewage investments in the past has been very regressive. However, as coverage of the better-off population increases, additional investment may be better targeted.

(c) Figure 54 suggests a trade-off between targeting and reach among the poor.

301. Despite the important limitations, the analysis suggests some interesting conjectures:

(a) As to be expected, social investments (education, urban services) rank poorly in their effectiveness to transfer resources in the short term. Counting all benefits through, some of these investments have benefits that exceed those of some transfer programs. Prioritization depends on whether the objective is short-term relief or medium to long term poverty reduction.

(b) Many programs are less cost-effective in transferring total benefits to the poor than a hypothetical uniform transfer payment (many urban investments, secondary, adult, and higher education, social security, and unemployment insurance, among others). Since these programs do not withstand a simple

Figure 56: Incidence of Primary Education – National Quintiles

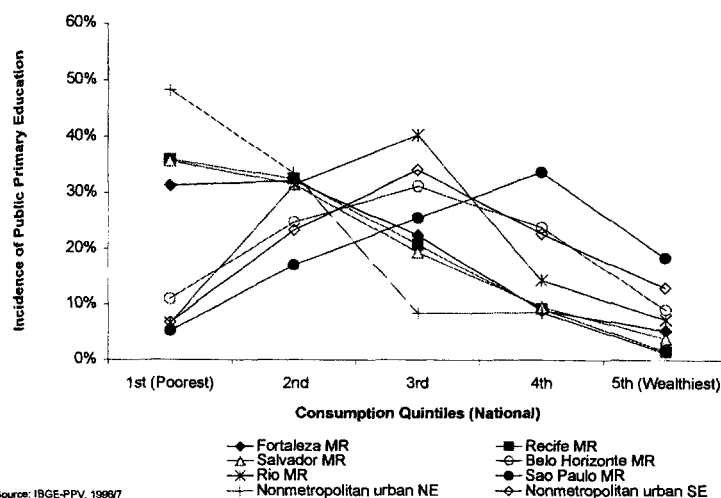
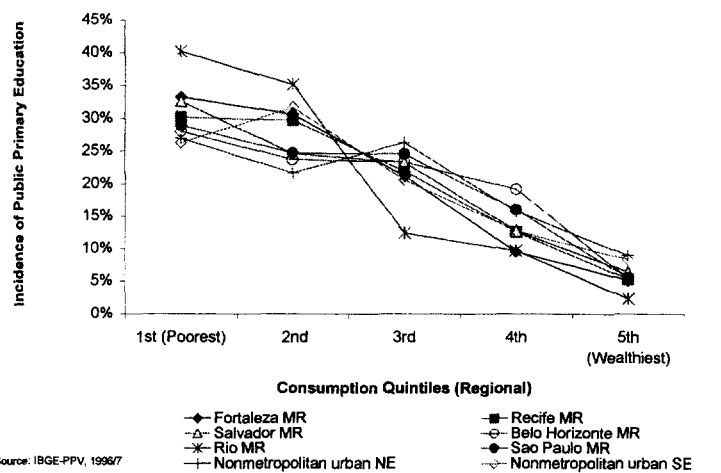


Figure 57: Incidence of Primary Education – Regional Quintiles



The more complete the reach to the poor, the more difficult it is to control leakage. This is the challenge faced in up-scaling small and well-targeted social development programs. The challenge is to either reallocate funds from programs with inadequate reach and tar-

getting to programs further away from the top left corner, or to redesign existing programs such that they move toward the top right corner, representing better targeting and wider reach among the poor.

Regional Spending Incidence

302. Most distributional analysis in this report is based on consumption quintiles constructed on the basis of the distribution in the area covered by the PPV (Northeast and Southeast regions). Using these "national quintiles", the distributional impact of most programs differs quite significantly between regions. In particular, in the richer regions, the incidence appears much more regressive than in the poorer regions. Figure 56 shows this incidence of regression for the example of primary education: almost 50% of primary school students in the non-metropolitan urban Northeast come from the first quintile of the national income distribution; but only a little over 5% of primary school students in São Paulo Metropolitan Area come from the first quintile of the national income distribution.

303. A simple reason for this observation is that very few individuals from the bottom quintile of the national consumption distribution live in the richer regions while few individuals from the top quintile live in the poorer regions. There are simply very few people in São Paulo that are poor in national comparison. In the rural Northeast, there are very few people that are rich in national comparison; here every program is automatically relatively well targeted (see Figure 55 for the regional composition of national quintiles).

304. Incidence analysis on the basis of the national distribution is useful for national policy making. Targeting of social spending would indeed improve significantly if federal resources were shifted from wealthier to poorer parts of the country. There is, however, another equally valid point of view. From the perspective of a local policy maker who decides on the allocation of local reve-

nues, the choice is not to spend in different parts of the country but in different programs of the same region. From this perspective, it is instructive to compare the incidence of spending across regions based on the distribution within each region.

305. Figure 56 and Figure 57 compare the incidence of primary education spending using both methodologies. Figure 56 clearly shows how spending on primary education in the Northeast is well focused on the bottom quintile of the national consumption distribution while spending in the Southeast is focused on the middle of the national distribution. Figure 57 shows a very different picture with amazing similarity across all spatial units. This graph shows that in all units a roughly equal share of primary school students come from the bottom quintile of the respective regional income distribution.²⁷ If the federal government spent its resources in primary education in a rich state, incidence would be regressive. However, if a wealthier state spent its own resources on primary education, this would improve the local income distribution.

Elements of a Poverty Reduction Strategy

306. What does it take for a household to no longer be poor? The following list comprises a possible attempt to define the conditions that would constitute the escape from poverty:

- (a) Income above the poverty line sufficient to meet basic requirements, in particular food. This income should come from a reliable source, a typically stable job or self employment).
- (b) Basic education for all household members (except possibly the elderly).
- (c) Access to basic health care.

²⁷ The observation that program incidence across locally constructed quintiles show similar patterns in different spatial units (representing very different consumption levels) is repeated for other types of services.

- (d) Access to basic shelter including safe water and basic sanitation.
- (e) Provisions to protect consumption in case of unexpected shocks (such as loss of employment, illness, or the death of a family member).
- (f) Basic protection from physical threats to life (such as crime and environmental risks).
- (g) Availability of basic opportunities for social participation (such as neighborhood associations and religious groups).

307. The poor can conveniently be divided into the following three subgroups:

- (a) The chronically poor: This group includes poor households that are structurally receptive to policies enabling them to sustainably escape from poverty. This group includes the unemployed (who are capable of employment) and the working poor.
- (b) The transient poor: This group includes households that are temporarily poor due to the loss of employment, illness, death, or other shocks. Whether the transient poor can recuperate from the shock they suffer or turn chronically poor depends on the availability of safety net programs.
- (c) The structurally poor: This group includes those households that are structurally dependent on transfer programs where household members are typically incapable of permanent employment.

308. The basic question this report seeks to answer is how the Government can help as many poor people as possible in their quest to escape from poverty. Government policies include a combination of policies:

- (a) Growth and other policies which facilitate the participation of the poor in the economy will create employment and income opportunities, in particular for

the chronically poor, and to a more limited extent, for the transient poor. Those who barely reach the extreme poverty line will still depend on the Government for many other services associated with the escape from poverty. Those whose incomes rise beyond the poverty line will increasingly be able to provide these services for themselves or at least pay the full cost of these services. Meanwhile, Government policies should improve the efficient provision of services through the market.

- (b) Public education, health, access to credit for productive activity, and basic urban services enhance the assets of the poor and increase their capacity to benefit from the opportunities created by growth. Education, health, and the most basic urban services are suitable instruments for resource transfers to the poor. In the case of other services and credit, access is much more important than pricing. In fact, subsidization of credit services typically reduces access to the poor.
- (c) Transfer and safety net programs can pursue three different objectives. First, insurance programs (such as unemployment insurance and old age pensions) can provide income protection for the transient poor. Strictly speaking, such protection requires the creation of insurance markets but no budgetary outlays. Second, social assistance programs for the structurally poor are typically the only viable approach for lifting this group out of poverty. Third, well targeted transfer programs can reduce the number of the chronically poor so long as these programs are designed to avoid adverse incentives against the beneficiaries' own efforts.

309. Tradeoffs between growth and regulatory policies on the one hand, and social spending, on the other hand, exist only to the extent that excessive social spending would crowd out critical public investment or lead to fiscal instability, increased interest rates,

and thus reduced growth. The tradeoffs involved in allocating funds between different social programs are discussed in detail in this report and summarized in the subsequent sections.

Reforms to Give the Poor Access to Formal Markets

310. This report emphasizes that the poor are frequently and effectively excluded from the formal economy, including formal labor, housing, and credit markets. The poor mostly work in the informal sector without access to many of the benefits of formal employment. The poor often occupy shelter without formal property titles in informal neighborhoods without access to many public services. Moreover, the poor typically do not have access to formal (often subsidized) credit. Their exclusion from formal markets severely limits their opportunities to grow out of poverty and deprives them of many of the benefits that go along with access to formal markets.

311. In many cases, public policies contribute to this exclusion. Inflexible labor market regulations do not meet the preferences of the majority of the poor and their employers. Furthermore, housing and land use regulations are rigid and ambitious, making formal housing unaffordable for the poor.

312. Exclusion of the poor from formal markets has several negative impacts. First the poor have to rely on informal labor, housing, and credit markets, which often suffer from high transactions costs, lack of legal recourse, lack of collateral, ineffective enforcement mechanisms, and ambiguous property rights. Second, informality implies exclusion from many government services and benefits, a factor likely to contribute significantly to the inadequate targeting of social programs in Brazil. Informal employees have no access to pensions, unemployment insurance, *Abono Salarial*, severance funds, and other benefits. Residents of informal settlements often encounter additional problems in securing access to public

infrastructure and public safety. Moreover, these residents typically do not benefit from subsidized formal sector housing programs.

313. The first step toward overcoming the exclusion of the poor from formal markets is recognition of the issue. Governments are now taking this first step. The next step is the definition of explicit policies toward informal markets. Policies should not be directed at the repression of informality, which would take away an important solution from many poor, but at making formal markets work better for the poor.

314. In many cases, exclusion from formal markets results from excessive regulation or regulation that is ambitious for Brazil's level of poverty. Regulatory reforms can increase the reach of formal markets to those currently excluded. Lowering housing and land use standards, for example, can reduce the cost of formal housing, and make formal property titles more accessible to some of the poor. Labor market reforms may reduce some of the benefits associated with formal employment but make these benefits available to many of the poor currently in the informal sector.

Targeting Social Spending

315. The further elements of a poverty reduction strategy essentially relate to the reform of public social spending. Improvements in targeting and efficiency of social spending are complicated by rigidities in the form of Constitutional and legal entitlements as well as by earmarked funding sources. Constituencies are attached to each program from which funds might be removed and reallocated toward better targeted programs. Progress on social spending reform is therefore a gradual process and should be assessed against realistic benchmarks. Social spending reform needs to include implicit public or quasi public spending where credit programs are administered by public banks and subsidies are implicit in public services and utilities.

Table 29: Targeted and Untargeted Transfer

Transfer Needed for Poverty Eradication	Targeted Transfers	Universal Transfers
Brazil	R\$12 billion 1.8% of GDP	R\$120 billion 18.8% of GDP
Ceará	R\$1.3 billion 11.4% of GDP	R\$5.3 billion 48.0% of GDP

316. As seen before, the elimination of extreme poverty in Brazil would theoretically cost no more than R\$12 billion per year and would be fiscally feasible if perfect targeting were possible. In contrast, the elimination of poverty through hypothetical untargeted universal policies would require a transfer to every poor Brazilian of an amount equal to the poverty line. The cost of such hypothetical programs (excluding administration costs) would be an unaffordable R\$120 billion annually or ten times the cost of the elimination with perfect targeting. This comparison shows the extreme importance of targeting in a relatively wealthy country. In the richer parts of Brazil, targeting is more important than in the poorer parts. For example, in the State of Ceará, a poor state by Brazilian standards, elimination of poverty (using the same poverty line adjusted for local price differences) would require 11.4% of state GDP compared to 48% through universal untargeted transfers (see Table 29).

317. At least, three arguments are commonly advanced against targeting. First, people just above a given poverty line are often still considered very poor (appropriately in the case of the extreme poverty line used in this report) and in need of government support. While many people above any given poverty line are also poor and may also depend on government support, including them in transfers would either require more spending or reduced coverage of the poorest. While the extension of social programs to those above a given poverty line may be desirable, in practical terms, this would require the exclusion from such a program of even poorer people below the poverty line. While the Government should also focus on creating economic opportuni-

ties for those above the poverty line, in most cases this does not require subsidies.

318. The second argument against targeting is based on the political economy. It suggests that targeted programs which do not also provide benefits to the majority of (non-poor) voters and taxpayers will quickly lose political support. The validity of this argument depends on the motives of the non-poor (their extent of altruism) and their perception of negative externalities of poverty (such as crime).

319. The third argument correctly points out the possible negative incentive effects of well-targeted programs. Programs can have a negative incentive for beneficiaries' own efforts when their eligibility depends on current beneficiary income. In fact, a perfectly targeted transfer system can create an effective tax rate of 100% for incomes up to the poverty line. Such negative incentive for the own efforts of the poor can create undesirable poverty traps.

320. While there can be valid arguments against perfect targeting, these are of limited practical relevance in the case of Brazil. Currently, aggregate social spending is not just untargeted but actually regressive (or targeted against the poor) with less than 20% of social spending accruing to the bottom quintile. The arguments against perfect targeting do not apply to the gradual increase of targeting from a situation of regressive spending.

321. Better targeting requires different approaches for different types of programs.

(a) For universal programs, such as education, health, and urban services, the targeting of public spending can be improved without abandoning universality. This improvement involves two policy actions. First, public spending should focus on spending items that disproportionately benefit the poor (such as schools and water supply in poor areas and public health posts). Second, Government policies should require cost re-

covery for the non-poor (for advanced health services and university education).

- (b) For insurance programs, such as pensions and unemployment insurance, contributions and benefits should be set such that public funds are only used for transfers targeted toward the poor.
- (c) Income transfers and related programs, including subsidized tariffs for public services, should be strictly tied to a means-testing or quasi means-testing procedure.

322. Given the large intra-regional and inter-regional inequalities, Brazil requires explicit federal social policies. National policies should use uniform targeting criteria. This means that the federal government should establish a national poverty line and apply cost-effectiveness criteria to allocate national resources. Allocating national resources based on cost-effectiveness criteria will imply a heavy bias toward spending in the poorer areas of the country. If the federal government applied such a uniform standard, targeting extreme poverty would become much more feasible. Also, transfers to equalize regional spending for programs such as FUNDEF have a similar positive effect.

323. Subnational governments in richer regions should be encouraged to apply more ambitious criteria for incremental spending from their own sources. States and municipalities (especially in richer areas) should explicitly assume a role beyond the basic national standards to aid the not-quite-so-poor and employ more of their own resources in pursuing more expensive policies.

Resource Allocation Between Programs

324. International comparisons show that total social spending, including social security as a share of GDP (about 20%) is high in Brazil, but spending on education and health is relatively low. Given fiscal constraints and the importance of fiscal equilib-

rium for the long-term prospects of the poor, the level of social spending cannot be addressed until social security reform begins to free up resources. In the meantime, improvements in the targeting and efficiency of social spending are critical.

325. Resource allocation between programs should take basic economic principles into account. There needs to be rigorous comparison of the efficiency and effectiveness of social programs. Demand and willingness to pay serve as the basic guide to estimate program benefits. Redistributive objectives should not be used to justify bad investments. Investments and current transfers can and should be compared on the basis of cost-benefit and transfer effectiveness analyses. Social investments should pass an efficiency test that demonstrates they are more cost-effective than safety net transfers.

326. The highest priority for focusing public spending is still education. As primary enrollment is nearly universal, the Government increasingly and appropriately focuses on the quality of basic education and on increasing enrollment beyond the basic level. Strengthening the social safety net, in particular in the informal sector and for structural policies such as children's school attendance will likely accelerate the process of poverty reduction. However, such programs should be implemented with great care and should include rigorous evaluation to ensure efficient implementation, sharp targeting, and reduce the possibility of adverse incentives.

327. There are programs whose rationale does not withstand a rigorous review in light of the considerations discussed in this report. Such programs should be reduced or even eliminated. A rather obvious example is the *Abono Salarial*. Areas where public spending should be reconsidered and mechanisms implemented for beneficiaries to contribute a higher share of the costs should include university education, public sector pensions, and unemployment insurance. In the case of unemployment insur-

ance, restructuring should include the FGTS severance fund system.

328. Areas where spending should be reallocated within sectors includes healthcare, where basic services require improvements but some parts of spending are highly regressive and can be restructured. Similarly for urban services and related infrastructure projects, large investments for the poorest population continue to be necessary while improved cost recovery, tariff reform, and private sector participation can reduce the fiscal burden of services to the non-poor.

Demand Orientation and Empowerment of the Poor

329. Empowerment of the poor as a poverty reduction strategy plays an increasing role in the international thinking on development. An in-depth analysis of the issues relating to empowerment of the poor in the context of Brazil is left for future work. At the same time, it is important to recognize the potential importance of the related issues. Empowerment of the poor as a strategy for poverty reduction arises from the analysis of institutional, social and political processes that bring about policies that are more or less favorable for the poor. Empowerment includes, among others: (a) public administration accountable, accessible and responsive to all, including the poor; (b) access for the poor to formal market institutions; (c) the breaking down of social exclusion and barriers for specific disadvantaged groups; and (d) effective participation of the poor in the definition and implementation of public policies.

330. The poor's participation in the design and implementation of the policies affecting them has three basic objectives. First, participation is instrumental to revealing the demand of the poor. Participatory processes to select priorities are thus fundamental for social policies that meet the demand of beneficiaries. Second, participation can significantly lower the cost of policies in different areas. In-kind contributions from beneficiaries, participation of NGOs, super-

vision of contractors, and procurement by community associations can all have a significant cost-saving effect. Third, participation itself is desirable and can lead to the empowerment of the poor beyond the narrow objectives of a specific project.

331. Brazil has a strong tradition of community groups, neighborhood associations, and other related non-governmental organizations that can all be critical institutions for overcoming the exclusion of the poor from political and economic life. These groups can articulate demands and generate political pressure for the provision of public services to the neighborhood. They can themselves provide social services to the community and even facilitate access to the formal economy. Many community associations are led by impressive individuals who can serve as important role models for the entire community and can be a critical link with the formal economy for overcoming exclusion.

332. This section attempts to point out the critical linkages between projects directed at urban poverty reduction and the participation of community or neighborhood associations. The nature of participation in a given project has at least two critical impacts. First, it can influence the extent to which a project achieves its direct (often physical) objectives. Second, it can improve or worsen the ability of a community to achieve its own objectives. Both effects are well illustrated by the comparison of participatory processes in two examples of urban upgrading (see FASE annex in Ribeiro 2000 background paper).

333. The first example (Ilha João de Barros, Recife, PE) illustrates the positive effect of participation. In Recife, a long-standing process installed through the PREZEIS program, has been in effect for prioritizing and implementing urban upgrading investments. Demands for public investments are channeled from neighborhood associations to a city-wide forum that articulates priorities to the municipality. Investments are planned in close coordination with neighborhood

associations. In this case, the community has supervised the works and participated in their implementation, significantly reducing final costs. In addition, public investments have stimulated private investments, including the formation of a cooperative that is now a source of employment in the community. The project has effectively functioned as a catalyst for further community development and strengthened social capital and the capacity of the community to jointly participate in the political and economic process.

334. The second example (Jardim Metr pole, S o Jo o de Meriti, RJ) illustrates an urban upgrading project that also superficially followed a participatory approach but ended up reducing the social capital of the beneficiary community. In this case, an international financing agency required the participatory process in the context of a state-planned urban upgrading project. The participatory process was imposed on a centrally planned project with little regard to the specific local situation. A process with limited effective participation by community leaders has divided the community while unrealistic expectations about project implementation have undermined the leadership of existing community leaders. The result has been a situation where even the sustainability of the physical works is in doubt, and the community has probably lost some of its capacity for joint action.

335. A genuine process of involving and strengthening the community and its leaders in decision making and implementation are critical. Overall, too little attention has been given to relatively minor aspects of participation that can make a major difference in urban projects and the sustainability of public works. Such aspects of participation also affects the capacity of the community to overcome social exclusion; thus the impetus to incorporate the community in the decision making process may foster social inclusion.

336. Brazil has developed a rich experience of projects in which public resources are passed directly to the local community

which then decides on priorities and implements subprojects. Such projects have been widely used in rural poverty reduction and environmental management (World Bank 1995b). Projects such as the Ministry of Education's Fundescola Program transfer financial resources to parent-run school councils to finance school renovations and learning improvement activities developed out of a highly participatory process. Many of these projects have shown remarkable results and have effectively implemented subprojects that have an important impact in poverty reduction. These projects also serve as instruments of institutional transformation, contributing to the creation of social capital and the empowerment of poor communities. While the conditions in urban areas are distinct and do not allow for the autonomous creation of infrastructure at the community level, there is still scope for incorporating lessons from both small grant funds in rural areas and the experience that other Latin American countries have had with social funds and urban projects.

337. Finally, the design of social programs should correspond to the demand of the beneficiary population. This implies that service provision should be at the level of an individual's willingness to pay, except for programs suitable for resource transfers to the poor, such as basic education and health. Cash and voucher programs are preferable to in-kind service provision, unless better targeting or externalities justify provision of services in-kind.

Internal Efficiency of Programs

338. The reviewed material suggests a very substantial scope for further improving the internal efficiency of social spending in Brazil. The pertinent recommendations regarding overall improved public sector management are not repeated here. Nevertheless, the option to increasingly rely on private or non-governmental providers of social services deserves special mention. Voucher financing can be an effective and transparent instrument to increase consumer choice, competition, and internal efficiency.

Analysis, Evaluation, and Coordination of Social Spending and Policies

339. The recent *Plano Pluriannual* (PPA) and the *Projeto Alvorada* of the Federal Government represent major progress with respect to the planning and implementation of social policies. The PPA creates the framework for systematic and objective-oriented planning of Federal Government spending. If well implemented, the emerging evaluation framework of the PPA could prove essential for the improvement of the quality of social spending in Brasil. The *Projeto Alvorada* focuses government efforts and spending on a few selected priority social programs and their targeting on poor states, micro-regions and households. This program is a promising to attempt improve the prioritization, poverty-targeting, and coordination of social policies.

340. Efforts to fight poverty are currently dispersed between different sectoral agencies at three government levels, each pursuing their own agendas, which only partly coincide with a national poverty reduction strategy. Brazil needs a concerted effort to fight poverty. The development and implementation of a national poverty reduction plan could function as a vehicle for coordinating the activities of different entities and orienting systematic and cost-effective action toward the overall goal of reducing the extreme poverty rate by 50% by 2015. Many pieces of analysis that have been prepared in the past and the current report can serve as technical inputs into the formulation of a national poverty reduction plan. Development of the Plan itself should combine technical analysis with a participatory process for the determination of priorities and actions. The plan, its targets, and its actions should be periodically updated.

341. The need to continuously improve the quality and targeting of social spending requires the development of an evaluation culture. Serious analysis and evaluation is a critical condition for the better targeting and effectiveness of social programs. Analysis and evaluation procedures need to be

strengthened and built into any proposed social program. Even though increased efforts have recently been made, there are still large gaps in the evaluation of the impact of social policies. Rigorous impact evaluation (including comparative assessments of the impact on program beneficiaries vis-à-vis a control group) should become an integral part of every social program. There should be a central office (at the federal level, for example, in the Ministry of Budget and Planning) that defines criteria for impact evaluation and compares the findings across different programs.

342. Even though Brazil has an extensive and expensive system of household surveys (the monthly PME, the annual PNAD, the decadal POF, and the PPV), the sum of these household surveys are not particularly suitable for poverty analysis. Recognizing that poverty analysis is not the only purpose of household surveys, a biannual household survey based on the current PNAD but with an enriched questionnaire (based on the PPV) would provide a much better basis for analysis at the same or even at a lower cost.

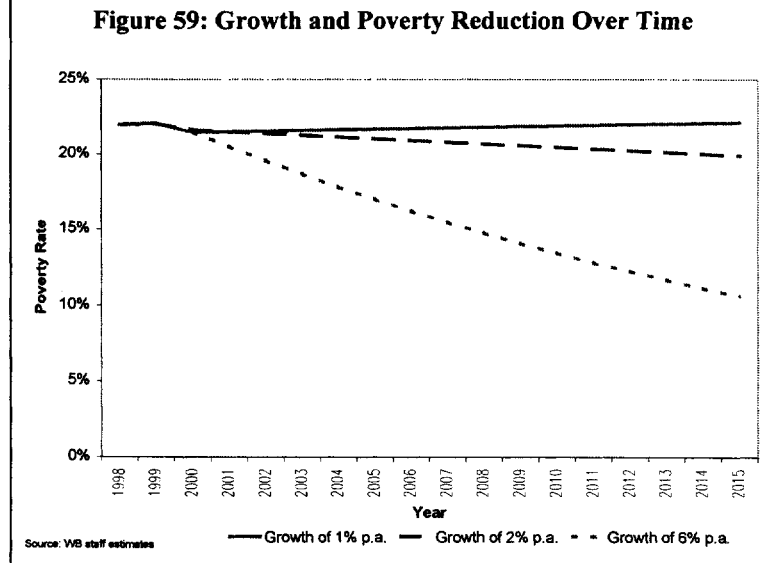
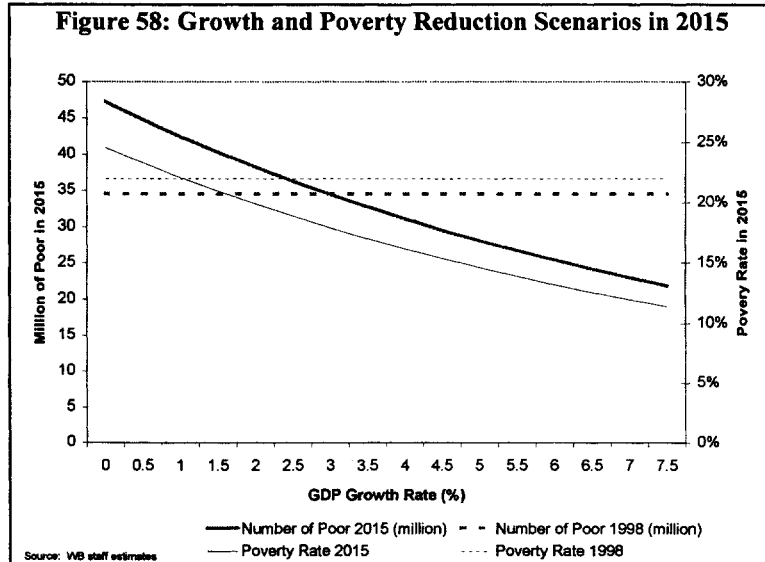
343. Brazil has an active research community that uses poverty data for high quality poverty analysis. Dynamic (longitudinal) poverty analysis is still incipient but likely a fruitful field of increasing activity. There are other specific areas, where additional research and analysis in the future would be particularly useful, including:

(a) a rigorous approach to classifying Brazil's poor into groups with relatively similar characteristics permitting better targeting of social programs; (b) more detailed analysis of the relationship between the pattern of growth and poverty reduction; (c) the two-way relationship between poverty-reduction interventions and the formation of social capital; and (d) rigorous analysis of the merits of program/project prioritization through technical analysis or community choice.

- (a) Growth reduces the extreme poverty rate with an elasticity of -1 , as discussed in a previous section of this report.
- (b) Improvements in the education system lead to an increase of the average number of education years of the workforce.

Poverty Reduction Scenarios

344. The poor, as defined in this report, currently have a total income of approximately R\$15.6 billion annually. About R\$6 billion of this income is directly related to social transfer programs (mostly pension programs). The remaining income gap of the poor is R\$12.2 billion per year. Several scenarios are constructed about how a combination of different policy instruments can reduce income-based poverty until the year 2015. These scenarios do not consider the dimensions of poverty associated with lack of public service delivery. The following assumptions are used for these scenarios:



For each additional year of average education, the poverty rate falls by 10%.²⁸

²⁸ From 1990-96, average years of education of the workforce rose from 5.0 to 5.85 years. With a rate of return of 10% and a growth-poverty elasticity of -1 , that translates to a roughly 10% fall in poverty in 6 or 7 years, or 15-20% by 2015. Obviously, additional years of education are not

Table 30: Poverty Reduction Scenarios 2015

	Immediate Eradication of Poverty	2015/50% Goal through Growth	2015/50% Goal through Social Spending	No Progress
GDP Growth per Year	N/A	6.0%	2.0%	1.0%
Additional Average Years of Education	N/A	1	2	0
Additional Transfers Reaching the Poor	R\$27 billion	R\$1.5 billion	R\$5.4 billion	R\$0
Budget Cost of Trans- fers (40% Effective- ness)	R\$67.5 billion	R\$3.8 billion	R\$13.5 billion	R\$0
Poverty Rate Now	0%	22%	22%	22%
Poverty Rate 2015	0%	11%	11%	23%

(c) Assuming a transfer effectiveness of 40%, R\$2.75 billion annual spending is required to transfer R\$1.1 billion to the poor, which would reduce the poverty rate by one percentage point (given the shape of the income distribution curve and assuming uniform distribution of transfers among the poor).

(d) One poor person can be permanently lifted out of poverty by a single transfer of productive capital of R\$5,000 (for example, through land reform, or micro-credit programs). The resulting annualized budget cost for a one percentage point poverty rate reduction is the same as for transfer programs (depending on the assumptions on cost of capital for the Government and the rate of return on investments).

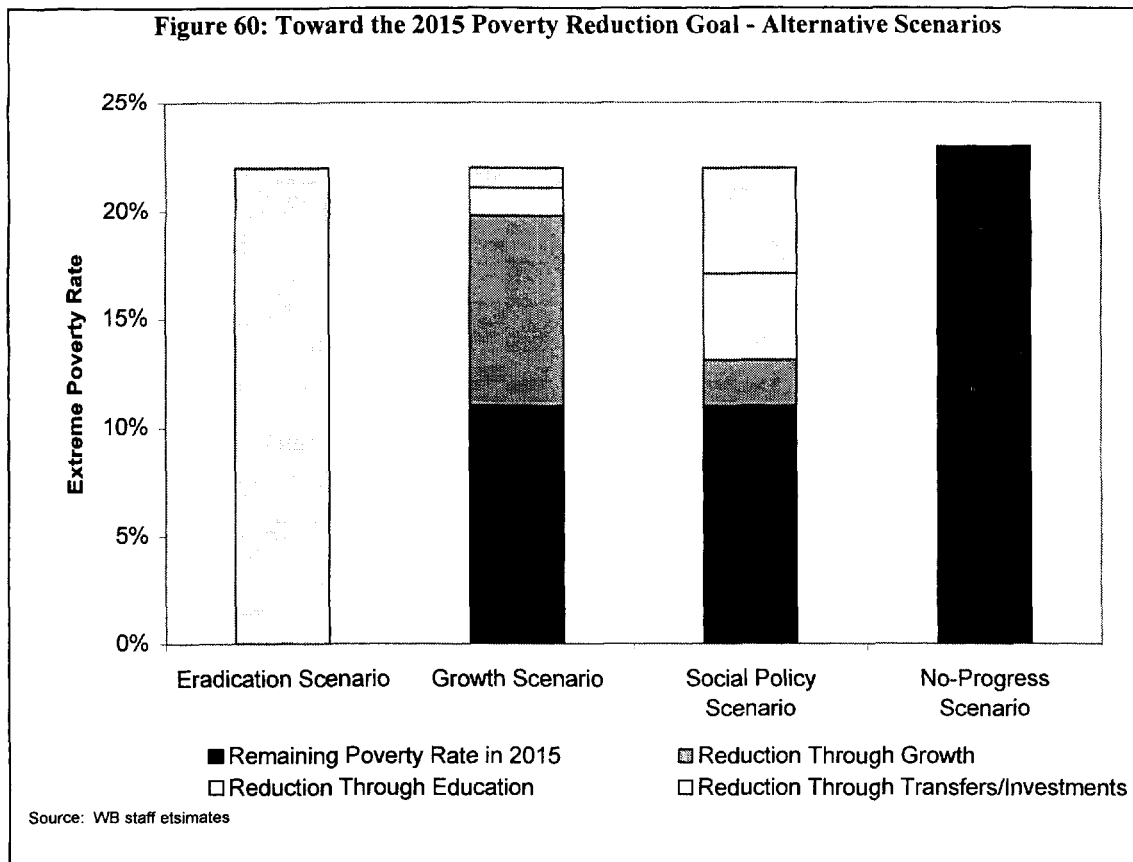
345. First, the impact of growth alone on poverty over time is analyzed. The simulations show both the potential for significant poverty reduction with high growth but also the increase in poverty that would occur with economic stagnation. The simulations are based on a population growth rate of 1.2% per year. Figure 58 shows that economic growth would have to equal the population growth rate of 1.2% to keep the extreme poverty rate constant at 22%. This scenario would maintain per capita GDP

spread equally across the income distribution, especially as the better-off already have much higher levels of education. However, it is not obvious that the poor, rather than those somewhere above the poverty line would benefit most from additional education. Therefore a conservative assumption of equal benefits across the income distribution is used.

constant. Growth of almost 8% per year would be required to halve the poverty rate by 2015, and growth of 2% and 6% would cut the poverty rate in 2015 to 19% and 13% respectively. 2.5% annual growth is required to keep the absolute number of poor constant. Growth of 2% and 6% would bring the absolute number of poor in 2015 to 40 and 25 million respectively. Figure 59 shows the evolution of the extreme poverty rate over time with different growth rates.

346. Based on the stated assumptions and different mixes of growth, education improvements and transfer programs, four poverty reduction scenarios are simulated. The first scenario is based on the immediate eradication of poverty. The next two scenarios are based on a more realistic reduction of poverty over time. The Government has indicated its intention to reduce extreme poverty by 50% by 2015, which provides a useful benchmark for assessing the relative importance of different policies. Finally, the last scenario assesses the impact of a slow growth no-progress scenario (see Figure 60 and Table 30):

(a) The Immediate Poverty Eradication Scenario would require annual transfers of R\$27 billion to reach the poor (much more than the aggregate income gap of R\$12 billion since uniform transfers to all poor are assumed). This would imply fiscal costs of R\$67.5 billion. Over time, growth and other elements of structural poverty reduction would replace part of the transfer payments.



Given prevailing fiscal constraints, such a fiscally expansive poverty reduction strategy is clearly not viable or sustainable.

- (b) The Growth Scenario is based on a 6% annual growth rate per year until 2015, complemented by educational improvements leading to one additional year of average education of the workforce, and additional transfers of R\$1.5 billion reaching the poor (at a budgetary cost of R\$3.8 billion annually). This scenario would lead to a halving of the rate of extreme poverty by 2015 to 11% and demonstrates the large impact growth can have on poverty reduction.
- (c) The Social Policy Scenario is based on slow growth of 2% per year until 2015 complemented by educational improvements leading to two additional years of average education for the workforce,²⁹

and additional transfers of R\$5.4 billion reaching the poor (at a budgetary cost of R\$13.5 billion annually). This would imply almost a doubling of transfers reaching the poor. This scenario would also reduce poverty to 11% by 2015 but shows that a major effort on improved (and increased) social spending would be required to reach this objective with slow growth.

- (d) In a No-Progress Scenario, with growth at only 1% per year and social spending maintained at the current per capita level, poverty rates would worsen slightly (to 23%) implying a significant increase in the poor population (from 35 to 43 million).

347. The obstacles to achieving the poverty reduction targets are multiple; and public policies to reduce poverty need to be

²⁹ Based on a current annual increase in average

schooling of 0.15 years, the increase of schooling by two years over 15 years appears achievable with a continued massive education reform effort.

composed of multiple strategies. Several obstacles to more rapid and significant reduction of poverty remain: (i) limited opportunities as the result of low growth and the relatively small poverty-reducing effect of growth; (ii) low educational attainments; (iii) poor health; (iv) lack of physical assets and services for the poor; (v) gaps in the social safety net and resulting insecurity; (vi) issues related to the quality and targeting of social spending; and (vii) limits to the effective voice of the poor in decision making processes of relevance to them. There is no single or simple solution to poverty in Brazil, and the different obstacles to poverty reduction have to be addressed simultaneously.

348. However, the perspectives for Brazil's poor have improved; a 50% reduction in the poverty rate by 2015 is attainable with decisive Government action. Taking together the policy reforms undertaken in recent years, other elements of the poverty reduction strategy discussed above, and the recently increased public and political attention toward poverty problems, the perspective for Brazil's poor is clearly improving. Structural reforms in the economy have laid the groundwork for sufficient economic stability to protect the poor from income fluctuations related to past failed stabilization

attempts. The impact of renewed growth on poverty reduction will be gradual but important. The major drive for improved education is still recent but will yield significant poverty reduction results in the medium term. The impact of other structural social policies including land reform, urban upgrading, professional training, labor market reforms, and others, is difficult to quantify but qualitatively important and expected to continue. The poverty reducing impact of transfer programs has been large in recent years and is also expected to continue, especially if measures for better targeting are successfully implemented.

Summary of Recommendations

349. The most important elements of the poverty reduction strategy proposed in this report are sustained growth build on fiscal adjustment, continuation of the massive ongoing reforms to improve quantity and quality of education, and a deeper effort to improve the quality and targeting of social spending overall. Table 31 summarizes the policy areas that compose a strategy for urban poverty reduction (the first column), the types of policy and spending reforms to be pursued (the second row), the principles for policy reform (the third row) and the elements of a reform program (cells).

Table 31: Policy Reform Summary

		Functioning of Markets Regulatory Reform	Cost Effectiveness and Targeting of Social Spending Social Spending Reform			
	Role of Area	Making markets work for the poor and allowing access to formality	Targeting	Efficient Allocation Between Programs	Demand Orientation and Beneficiary Choice	Internal Efficiency
Principles and Messages		Growth and regulatory reforms to improve opportunities and access for the poor to formal markets should be vigorously pursued.	The transfers (subsidies) of social programs should be targeted to those below a chosen poverty line, which should be uniform for all programs (local governments in rich areas could adopt a higher poverty line). Per-capita transfers should always be higher for those below the poverty line.	Reallocate resources between programs according to transfer effectiveness. Social investment programs should only be undertaken if their benefits (including the saved administration costs of transfer programs) exceed their costs.	Provide social services according to demand and encourage active beneficiary participation in design. Transfers of cash are preferable over vouchers, which are preferable over in-kind transfers unless there are justifications in terms of better targeting, public goods, or well-grounded paternalistic motives.	Improve internal efficiency of program implementation (least cost for physical output and impact).
<u>Opportunity:</u> Growth	<ul style="list-style-type: none"> Creates income opportunities for the chronically poor. 	<ul style="list-style-type: none"> Pursue economic growth, including sustainable, high-quality fiscal adjustment as a prerequisite. Further develop an informal labor market policy, including labor regulation reforms. Remove distortions against labor intensive growth. Study the low growth elasticity of poverty reduction in Brazil. 		<ul style="list-style-type: none"> Review and phase out inefficient credit programs for employment generation. 		
<u>Capacity:</u> Education Health Urban Services Physical Assets (Credit)	<ul style="list-style-type: none"> Strengthen the assets and capacity of the poor to make use of opportunities. Human capital and most basic urban services are suitable for resource transfers; other services and credit should be provided at efficient prices. 	<ul style="list-style-type: none"> Develop policy for informal housing market, including regulatory reform and regularization of land tenure. Develop a private, unsubsidized housing finance market for the non-poor. Develop credit policy for market; including support for viable microcredit. Pursue privatization of urban services with clear incentives and oversight to serve the poor. Increase municipal incentives and capacity for service to the poor. Promote modal, fare, and schedule integration in urban transport systems. 	<ul style="list-style-type: none"> Focus education and health investments in poor areas. Introduce cost recovery and expand bursary system for higher education. Reassess the apparent regressive use of SUS-funded private health facilities. Implement reform of social tariffs and increase cost recovery for urban services. Introduce conditions for service provision to the poor in fiscal transfers to states and municipalities. 	<ul style="list-style-type: none"> Further strengthen investments in basic education and health in poor areas. Evaluate and possibly expand well targeted professional training and adult education programs. Discontinue subsidized and poorly-targeted housing programs (<i>Carta de Credito</i>). 	<ul style="list-style-type: none"> Evaluate conversion of <i>Vale Transporte</i> into a component of cash salary. 	<ul style="list-style-type: none"> Implement public sector management reforms. Where appropriate, introduce competition and increased efficiency through possible voucher-type systems. Strengthen genuine participation in urban projects, including projects with resource transfers to poor. Increase the local integration of policies in education, health, urban services, and others.

		Functioning of Markets Regulatory Reform	Cost Effectiveness and Targeting of Social Spending Social Spending Reform			
	Role of Area	Making markets work for the poor and allowing access to formality	Targeting	Efficient Allocation Between Programs	Demand Orientation and Beneficiary Choice	Internal Efficiency
Security: Social Insurance Social Assistance	<ul style="list-style-type: none"> • Social insurance protects from transient poverty (no subsidies). • Social assistance protects from structural poverty and can reduce chronic poverty. 	<ul style="list-style-type: none"> • Encourage development of private un-subsidized social insurance mechanisms for non-poor. 	<ul style="list-style-type: none"> • Introduce quasi-means testing system for transfer programs. • Create register of social assistance beneficiaries. 	<ul style="list-style-type: none"> • Phase out <i>Abono Salarial</i>. • Reduce public funding for insurance programs, in particular public sector social security. • Reform unemployment insurance and FGTS jointly and provide basic protection for the informal sector. • Expand <i>Bolsa Escola</i> type programs. • Phase out worker food stamp program. 	<ul style="list-style-type: none"> • Replace food and nutrition programs (not anchored in the health or education system) with means-tested cash transfers. 	<ul style="list-style-type: none"> • Implement public sector management reforms.
Empowerment: Participation	<ul style="list-style-type: none"> • Permits demand oriented services. • Reduces costs. • Helps overcome social exclusion and build social capital. 		<ul style="list-style-type: none"> • Targeting through local councils and community associations in poor neighborhoods. 		<ul style="list-style-type: none"> • Genuine participation in program design to determine beneficiary demand. 	<ul style="list-style-type: none"> • Cost-savings through beneficiary participation and community procurement.
Planning, Analysis, and Evaluation		<ul style="list-style-type: none"> • Develop National Poverty Reduction Plan, based on technical analysis and a participatory process. • Define an office poverty line and social indicator targets in order to improve tracking and accountability. • Create evaluation culture for all social policies and central office for evaluation in the Budget Ministry. • Reform system of household surveys to improve capacity to evaluate public policies. • Support priority poverty research and analysis in selected areas. 				

5. List of Background Papers

The following background papers for this report are the responsibility of the respective authors and are not official World Bank documents; they are available on the following website: <http://www.worldbank.org/br>.

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