

HEALTH SECTOR REFORM PROJECT - REFORSUS

(BR-0199)

EXECUTIVE SUMMARY

**BORROWER AND
GUARANTOR:** Federal Republic of Brazil

EXECUTING AGENCY: Ministry of Health (MoH)

AMOUNT AND SOURCE:	IDB:	US\$350 million(OC)
	IBRD:	US\$300 million
	Local counterpart funding:	US\$100 million
	Total:	US\$750 million

FINANCIAL TERMS AND CONDITIONS:	Amortization period:	25 years
	Disbursement period:	4 years
	Interest rate:	variable
	Inspection and supervision:	1%
	Credit fee:	.75%

OBJECTIVES: The project's main objective is to expand and improve the delivery of care under the Unified Health System (SUS), which is the sole source of care for the poor, through investment in infrastructure rehabilitation and equipment, parallel to the introduction of policy reforms which would improve the financial sustainability, equity, efficiency and management of the SUS. The investment component of this loan would be linked to the reform elements in several ways.

First, commitments for investments will be authorized only after satisfactory compliance with reform initiatives set forth in the Health Policy Letter and Policy Matrix (see Annex II-1). Second, the operational manual contains specific eligibility and selection criteria for investment projects which will ensure cost efficiency and equity.

DESCRIPTION: This is an operation with parallel financing from the IDB and the IBRD. The project has been prepared, analyzed and will be supervised by a joint team from the two financial institutions. The project would last four years and would have two components:

Component 1 - Improvement of Health Care Delivery in the Unified Health System (SUS) (US\$626.4 million equivalent). The project would finance subprojects proposed on a competitive basis by public and

philanthropic health care providers, including states, municipalities, Non-Governmental Organizations (NGO), and community-based organizations. The project would finance subprojects in the following areas:

- (1) Rehabilitation and equipment to impede further deterioration of the infrastructure and recover the technological deficit caused by years of underfinancing, poor management and lack of maintenance. Equipment purchases would be justified on the basis of (i) restoring the systems' capacity; (ii) putting idle complementary resources back into use; or (iii) reducing the cost of an intervention already being provided. It is estimated that 55% of project resources would be used in the rehabilitation of ambulatory care facilities and 45% in restoring the capacity of hospitals.
- (2) Family Health and Health Promotion Subprojects to improve accessibility and outreach in underserved areas, and avoid the overload of secondary and tertiary care. The project would finance about 2,500 family health and community health workers' subprojects, health promotion and disease prevention subprojects to cover 10 million people who live currently in poor areas and have no access to health care. Subprojects will provide emphasis on the delivery of a basic package of cost-effective clinical and public health interventions. Any investments in infrastructure rehabilitation and equipment for basic health units, will be parallel to the implementation of a family health and promotion subproject in that area.
- (3) Management and maintenance development to improve health care administration. The funding of rehabilitation and equipment subprojects would be subject to the satisfactory implementation of key management systems: (i) cost accounting; (ii) billing and cost recovery; (iii) minimum quality standards for maternal care and hospital infection; and (iv) safe handling of hazardous materials. Other key management improvements include: (i) the signing of a management contract; (ii) the establishment of a hospital board; (iii) the adoption of management information systems covering key sectors such as accounting and billing, personnel, pharmaceuticals and medical supplies, maintenance, clinical filing, patient flow and referral, laboratory and imaging; and (iv) the

use of evaluations, reviews, and other quality assurance systems

Component II - Improvement of Health Care Financing and Regulation (US\$60 million equivalent). This is an institutional development component focusing on areas critical to the sustainability of the investments financed under Component I. On a yearly basis, the Banks will monitor compliance of a set of important reforms (see policy letter in Annex II-1) which should ensure: (i) adequate framework and prices for reimbursing health care providers; (ii) emphasis on a sustainable list of health benefits and a differentiated reimbursement schedule favoring more cost effective interventions; (iii) cost recovery from the privately insured patients who use the Public Health System and better control over the quality of services and fraud.

Under this second component, the project will finance technical assistance including consulting services, epidemiological, institutional, economic, legal, and other studies. It would also support consensus-building and dissemination of activities such as publications, workshops and seminars, study visits, and training. The project will also finance a technical group who will advise the MoH on health policy issues developed as a result of the analysis of the studies proposed in the project.

**ENVIRONMENTAL
CLASSIFICATION:**

The Environmental Management Committee, at its meeting of May 21 1996, approved the Environmental Summary of the Operation (Category III), which was sent to the Public Information Center (PIC) on June 27, 1996.

BENEFITS:

The project will benefit mostly the poor who must rely on SUS as their only source of care. The project will allocate resources for improving SUS infrastructure emphasizing those health units located in low income areas, and the revision of reimbursement rates will correct price distortions which disproportionately affect the poor. Relative priority will be given to maternal and infant care services, to emergency and trauma centers.

The project would improve equity by: (i) introducing a mechanism to allocate investment budgets according to a transparent and easy to justify formula; (ii) prioritizing investments in low income areas; (iii) limiting reimbursement of expensive and relatively less cost-effective tertiary care, which is mostly used by privately insured patients and by middle and high income groups.

The project will improve both allocative and internal efficiency of the SUS by: (i) increasing the proportion of public health funds spent on more cost-effective interventions, both through revised tariffs and investment subprojects; (ii) establishing a new framework for pricing and reimbursing health care providers which will favor more cost-effective interventions at the expense of less cost-effective ones; (iii) restoring the system's capacity; (iv) putting idle complementary resources back into use; (v) reducing the cost of interventions already being provided; (vi) requiring improved management systems as a condition for receiving funding for rehabilitation and equipment; (vii) reducing fraud; and (viii) introducing cost recovery from privately insured patients.

Finally, the project would strengthen the capacity of states and municipalities to act as health care administrators and purchasers, and thus we would expect that services will better reflect the needs of beneficiaries and that accountability and social control will improve.

RISKS:

The main risks of the project are: (i) non-compliance with reform agenda, thus jeopardizing the sustainability of the investments; (ii) incomplete or poor implementation of the project; and (iii) lack of revenues to finance the incremental recurrent costs which will be generated by the project and adjustments in the reimbursement schedules which will be necessary to cover costs and to maintain capital.

Non-compliance with the reform agenda could be caused by the return of high inflation, lack of political will and high turn over at the MoH level. The return of inflation would make the proposed price adjustments extremely difficult. The effect of inflation could only be mitigated through indexation of prices to inflation, but this would only contribute to the inflationary spiral.

The risk of project breakdown would be minimized by continuing to involve the stakeholders in the identification, preparation and execution of subprojects, and by selecting investments on the basis of clear and transparent criteria which could be supported by any government. In any case, the Bank would decline to commit against new subprojects if annual expenditure reviews and policy analysis show non-compliance with the policy reform matrix agreed with the Government.

The risk of funding poorly justified subprojects would be minimized by regularly reviewing eligibility

and appraisal criteria for subprojects, by prior review of large projects by the MoH and the Banks and by using the results of the ex-post evaluation of a sample of subprojects as a means to improve project implementation.

The risk of health sector resources to be insufficient to finance recurrent costs would be minimized by making each year's investment decisions depend on the public expenditure review and health sector budget proposal, to make sure that the fiscal impact of the ongoing and the proposed investments are sustainable. Moreover, the project introduces new ways to either increase or to use more efficiently existing financial resources in the system, such as fraud control and cost recovery from privately insured patients.

**THE BANK'S COUNTRY
AND SECTOR
STRATEGY:**

The Bank's strategy and operative program for Brazil in the 1995-1997 programming cycle are fully consistent with the objectives of the Eighth Replenishment, the government's focus on systematically eliminating the causes (and easing some of the social consequences) of chronic inflation, and the need to foster economic modernization. The main elements of the Bank's strategy emphasize the need to: (i) promote the reform and modernization of the public sector both at the federal and subfederal levels; (ii) support the process of economic opening, in part through the modernization of the productive sectors and also through the *Redução do Custo Brasil* initiative, whose objective is the rehabilitation and improvement of the nation's transport and port infrastructure; and (iii) address socioeconomic inequities and poverty alleviation by increasing the effectiveness of social spending and improving the targeting of social programs. In the latter instance, special support will be given to continued decentralization of the social sector, in part through increased partnerships with the local community and civil society. At the same time, the traditional emphasis on basic sanitation and the environment are retained in the current Bank strategy.

The proposed project is consistent with the recently proposed general IDB's strategy for the social sectors, document CP-1029-1 approved by the Programming Committee on May 1st of 1996, and with Bank's strategy for the health sector in Brazil as described in the Country Paper, document GN-1897, presented to the Board of Executive Directors in February of 1996.

As the Brazilian Government is presenting a single project for parallel financing by the World Bank and IDB, the project is also consistent with the IBRD's strategy for the health sector, as described in the Country Assistance Strategy for Brazil (CAS).

The project is consistent with Bank's strategy: (i) defining objectives clearly; (ii) improving resource allocation with emphasis in budget flexibility and adequate management; (iii) approaching decentralization with caution; and (iv) assessing reform readiness in existing institutions. The project is in coherence with the IDB strategy for the health sector in Brazil: (i) introduces mechanisms that contribute to alleviate distortions in SUS; (ii) increases efficiency of health service delivery and promote the delivery of cost-effective interventions, including preventive care; (iii) strengthens administration of health service delivery at state and municipal level, improving their managerial and financial capacity to deliver health care services; (iv) strengthens the capacity of the MoH, the states and municipalities for improving health care; and (v) improves fiscal transfer mechanisms that incorporate criteria for equitable distribution of resources.

**SOCIAL
CLASSIFICATION &
POVERTY TARGETING:**

The proposed program is poverty-targeted, under the terms of paragraph 2.15 of the Eighth Replenishment document (AB-1704) because it supports primary health and mother and child health. In accordance with paragraph 2.13 of that document, the program falls into the category of operations seeking social equity and poverty reduction, since it focuses on health.

**SPECIAL CONTRACTUAL
CONDITIONS:**

As conditions prior to first disbursement, the Borrower shall:

(i) submit evidence that agreements, satisfactory to the Bank, with Banco do Brasil and Banco Nacional de Desenvolvimento Economico e Social (BNDES) have been signed to serve as financial agents in the implementation of Component I of the Program (par. 3.1); and, (ii) submit to the Bank for approval the proposed investment plan for the first year so as to assess its compliance with the Program's operational guidelines (par. 3.25).

The following special contractual conditions relate to agreements reached with MoH during project appraisal; these commitments shall be observed by the Borrower during project execution: (i) maintain the National Audit System for the SUS and extend it to all states and major municipalities (par. 2.10); (ii) maintain the Commission for Health Care Price Negotiations to revise and agree on prices charged

for the provision of health care under the SUS (par. 2.10); (iii) retain the services of a external auditor satisfactory to the Bank, to prepare financial and procurement audits every six months on the basis of appropriate samples (par. 3.23).

During project execution, as means to institute the review mechanism to monitor progress achieved in implementing both the investment and the reform components, the Borrower shall, through the MoH, comply with the following special contractual conditions: (i) submit to the Bank, by October of each year during Project implementation, the MoH budget proposal for the succeeding year showing adequate SUS funds to cover the proposed raise in reimbursements rates (par. 2.10); (ii) submit to the Bank semi-annual reports comparing achievements with the set of agreed performance indicators (par. 3.31); (iii) furnish to the Bank for approval, in the month of October of each year during Project implementation, the proposed annual investment program for the next succeeding year (par. 3.32); (iv) furnish to the Bank, in the month of October of each year during Project implementation, a report containing an evaluation of the progress in the carrying out of the Project and of the reforms set forth in the Health Policy Letter during the previous year, including an evaluation, on a sample basis, of subprojects, covering ex-post economic impact and beneficiary evaluation (par. 3.31 and 3.32); (v) review with the Bank, in the month of November of each year during Project implementation, the progress made in the carrying out of the Project, such review to be based on report referred to (iv) above; if, as a result of such review, the Bank considers that the progress made by the Borrower in implementing the Project or the reforms set forth in the Policy Letter is not satisfactory, the Bank may refrain from approving the proposed Annual Investment Program for the next year of project implementation (par. 3.32);

**PROCUREMENT OF
GOODS AND
SERVICES:**

International competitive bidding will be held for contracts over US\$5 million for civil works, over US\$350 thousand for goods and services and US\$100 thousand for consulting services (par. 3.17, 3.21 and 3.22).

I. HEALTH SECTOR BACKGROUND

A. Introduction

- 1.1 This report describes the health sector in Brazil, analyzes the issues it faces, and presents the Government's strategy to address these issues. The report then proposes the involvement of the Inter-American Development Bank (IDB) and the World Bank (IBRD) in the financing of the Brazil Health Sector Reform Program, and provides parameters for project implementation.

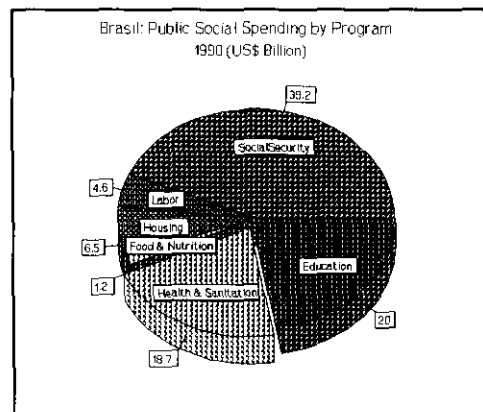
B. Recent socioeconomic trends and future prospects

- 1.2 In the recent past, Brazil has undergone major political and social transformations. Democracy has been restored, the economy has become less statist and significant political power has been devolved to the states and municipalities. Brazil's private sector has experienced high efficiency and productivity gains as the economy has been gradually opened. The Brazilian authorities and the Bank concur that the central policy objective over the medium term is the fight against poverty and inequity. Four sets of policy initiatives are required to mount a sustained attack on poverty: stabilization and broad based growth; reform of the roles of federal and state governments; specific policies in the areas of human capital formation, including education and health, infrastructure and environment; and specific anti-poverty policies, including both rural and urban poverty initiatives. This project would support the Government's implementation of specific policies in the health sector.

C. Poverty and social expenditures ^{1/}

- 1.3 Brazil's economic stagnation in the 1980s has left about 24 million Brazilians, 17.4% of the population, living below the poverty line in 1990. This level of poverty is well above the average for a middle-income country, and affects disproportionately the population in the Northeast.

- 1.4 Social spending has a critical role to play in improving the welfare of the poor by mitigating the consequences of poverty, and by facilitating their efforts to move out of poverty. Brazil spends large sums of money on social programs, disbursing US\$90 billion on them, or about 20% of GDP in 1990. However, this has not been translated into effective results



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The World Bank: Brazil Poverty Assessment. (Washington, DC: The World Bank Report 14322-BR, 1995).

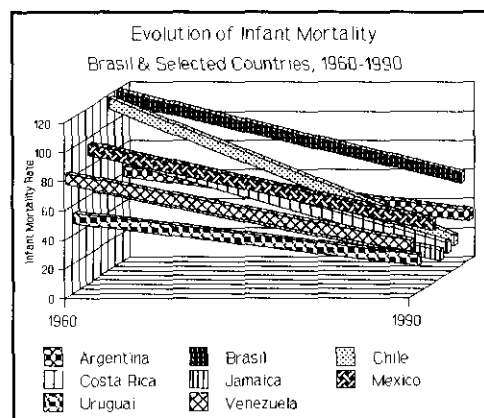
in terms of social indicators or poverty alleviation. The fact that social indicators are still so poor suggests serious inefficiencies in the structure and delivery of social services. Decentralizing the management of social programs could make services better reflect the needs of beneficiaries and avoid the high overheads associated with a centralized approach.

D. Population

- 1.5 According to the 1991 census, the Brazilian population numbered 146 million. The average annual growth rate between 1980 and 1991 was 1.93%, a marked decline from the rates of 2.5 and 2.9% registered during the 1970s and 1960s, respectively, reflecting, among other factors, the decline of the Total Fertility Rate, from 4.9 in 1970 to 2.8 in 1992. Between 1960 and 1991, a visible shift in the demographic age structure was recorded, as children 0-14 decreased from 43% to 34%, while people aged 60 or more increased from 4.7 to 6.1%. As a result of the decline in fertility and mortality, the elderly population in Brazil is growing rapidly. By the year 2000, it is estimated that 10% of the total population will be aged 60 or more. Seventy six percent of the population is now urban. The nine largest metropolitan areas grew at a much slower rate in the 1980s than in the earlier decade, but growth has picked up in the country's medium-sized cities.

E. Mortality and morbidity

- 1.6 Health conditions have improved over the past 20 years. From 1970 to 1993, life expectancy grew from 61 to 67 years and infant mortality declined from 95 to 57 deaths per 1000 births. Despite these improvements, the Infant Mortality Rate (IMR) continues to be high in impoverished parts of the country such as the Northeast, (92 per 1,000 live births in 1989), and is worse than could be expected for an upper middle income country such as Brazil. Argentina, Chile, and even lower income countries such as Jamaica have more favorable rates of decline of the IMR than Brazil (Figure 2.1). Neonatal mortality remained stable during the 1980s at approximately 25 deaths per 1,000 live births. Although 83% of births were attended by health staff in 1989, 47% of infant deaths were still due to perinatal causes. In 1994, the Maternal Mortality Ratio (MMR) was 38.2 per 100,000 live births, reaching 65.3 in poor regions. Similarly, Brazil has made less progress in life expectancy than other countries with comparable resources.



- 1.7 The decline of child mortality and fertility will create new demands on the health care system, related to the aging of the

population, and to the increased incidence of non-communicable diseases, difficult to prevent and costly to treat, such as cancer, chronic heart and pulmonary diseases.

TABLE I-1 Major Causes of Death, 1991	
Causes	%
Diseases of Circulatory System	27.9
External causes	12.7
Ill-Defined Causes	18.0
Cancer	10.7
Subtotal	69.3

- 1.8 Diseases of the circulatory system were already the leading cause of death in almost all Brazilian regions ^{2/}. Injuries from homicides and traffic accidents are growing in importance, each of the two causing more years of potential life lost than any other single cause except malignant tumors. The problem is particularly serious among adolescents, accounting for 55% and 74% of male deaths in the 10-14 and 15-19 age groups, respectively. In the poor North and Northeast regions, the primary causes of death were ill-defined since up to 50% of them are either not attended or not properly classified by a physician.
- 1.9 While chronic and degenerative diseases and violence are now the leading causes of morbidity and mortality for the entire population, communicable diseases remain a major risk for the poor and the young, especially for those living in the North and the Northeast where infectious and parasitic diseases rank third among the causes of reported deaths. Also, although mortality from vaccine-preventable diseases has declined in the late 1980s and early 1990s, the country is still experiencing epidemics of malaria, dengue, kala-azar (visceral leishmaniasis), tuberculosis, and AIDS. Preventable intestinal infections, pneumonia, and nutritional deficiencies accounted for 16, 11, and 4% of deaths, respectively. Only 60% of pregnant women receive some form of prenatal care, with coverage below 20% in many rural areas.
- 1.10 Data on hospitalization for 1984-1991 indicate that the leading cause of admissions was related to obstetric causes, or psychiatric and cardiovascular diseases, the three accounting for 23% of all admissions and 20% of hospital costs in 1994. Obstetric causes represented 10% of Brazil's Unified Health System (SUS) reimbursements and psychiatric admissions were the second largest

^{2/} Data on mortality and morbidity have to be interpreted with caution because: first, the proportion of the deaths attributed to ill-defined conditions ranges from 9.1% in the Southeast to 43% in the Northeast, and, second, data on hospitalizations may be biased by the hospital payment system based on diagnosis.

reimbursement category, accounting for 6.4% of all discharges reimbursed.

F. Organization and financing of health care 3/ and 4/

- 1.11 Brazil's Unified Health System (SUS), which is the sole source of care for 110 million Brazilians, is unique in Latin America and more comparable to the model of Canada and several European countries. This singular configuration is the result of over twenty years of Sanitary Reform initiatives geared towards the decentralization, medicalization and articulation of the delivery and financing of the Brazilian health care system. The different strategies proposed and the tensions encountered during this evolutionary process respond to a great extent to the tradition of centralized control that has dominated Brazilian political history, to the role played for almost two centuries by the "Santas Casas de Misericórdia" in caring for the poor, to the "Sanitary Movement" born from the campaigns against parasitic and other infectious diseases, and to a strong presence of health care interests in the Brazilian Congress.
- 1.12 In the 1988 Constitution and related SUS legislation: (i) coverage is universal; (ii) health benefits are all-inclusive and free at the time of use; (iii) financing comes mostly from general taxation and subsidizes the poor, but private health insurance plays a significant complementary role for middle & upper income segments of the population; (iv) funds are allocated to states and municipalities on the basis of prospective global health budgets; (v) most care is delivered by private providers who compete for SUS patients; (vi) ownership and administration of public services is decentralized to municipalities and states; and (vii) providers are reimbursed on the basis of production (diagnosis-related groups).

1. Coverage

- 1.13 Despite the impressive degree to which the SUS coincides with good organizational and financial models, it has a number of significant failings. Although coverage is in theory universal, the system leaves large areas and groups uncovered in the North, Northeast and in periurban areas, where an estimated 10 million people do not have access to health care. With 30 hospital beds and 14.2 physicians per 10,000 population Brazil compares favorably with the average for Latin America and other middle-income countries. The country has a relative scarcity of professional nurses, with a 3.7 doctor/nurse ratio and the distribution of health services and professionals in the various regions is very unequal, being concentrated in the most developed regions and in state capitals.

3/ Mendes E.V.: Comentários sobre Financiamento e Gastos em Saúde no Brasil, in: Vianna, S.M. et al: O Financiamento da Saúde no Brasil, (Brasília: OPAS, Série Economia e Financiamento No. 4, 1994).

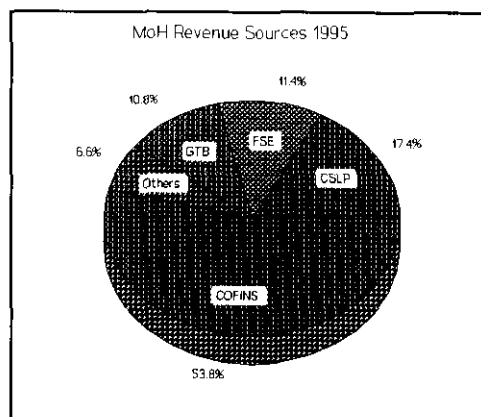
4/ Aiyer, Jamison and Londono: Health Policy in Latin America: Progress, Problems and Policy Options. Cuadernos de Economia 32 (1995), pp 11-28.

In the Northeast, prenatal care coverage can be as low as 12% (ex. State of Piauí), and 31% of births still take place at home.

2. Benefits

- 1.14 The current Constitutional mandate to pay for all health services for the entire population is **unsustainable**: the present level of public health expenditures (in 1994, US\$93 per capita and 3% of GDP) is insufficient to pay for a comprehensive health benefit package for the population which rely exclusively on the SUS. The cheapest private health insurance and group medicine systems, which offer limited benefits to relatively healthy populations, charge between US\$156 and US\$131 per person covered per year, respectively. Rationing is achieved through caps on admissions and budget ceilings.

- 1.15 Financing comes mostly from general taxation and subsidizes the poor. Most of the health sector is financed from the Social Security Budget (SSB) (Instituto Nacional de Previdência Social) which also finances, welfare services, social security and unemployment benefits. Funds are not earmarked for these various programs. SSB revenues originate from a mix of social contributions and treasury revenues such as: (i) employee and employer social security contributions; (ii) Contribuição para o Financiamento da Seguridade Social (COFINS) - taxes on businesses' output ^{5/}; (iii) Contribuição Social Sobre o Lucro das Pessoas Jurídicas (CSLPPJ) - tax on businesses' net profits; and (iv) other smaller sources - Social Integration Program (PIS) and Civil Servants Asset Creation Program (PASEP). The MoH budget includes other incomes from Emergency Social Fund (FSE); government treasury bonds (enrolled into debt financing) and other small revenues.



- 1.16 The private health insurance sector plays a significant complementary role in health service financing. In 1994, 33 million people were covered by one of the several schemes provided under private health insurance, which represents a US\$6.6 billion industry. In spite of the magnitude of the sector and its well known market failures, the private health insurance system is mostly unregulated and practices adverse selection; in addition it contributes to SUS inequity by driving middle and upper-class

^{5/} The collection of these contributions has been very inefficient. IPEA estimates that, in 1992, the level of evasion to the COFINS contribution was around 76%. The end of the hyperinflation period led to a sharp improvement in the collection of COFINS and CSLP contributions, but not in the revenues from payroll deductions.

beneficiaries to use the SUS free-of-charge for costly tertiary care.

3. Allocation of resources

- 1.17 The allocation of recurrent and capital budgets is often not transparent and does not promote equity. Public funds for investment in rehabilitation and equipment were supposed to be transferred automatically to States as a proportion of their recurrent budgets. In reality they have been mostly allocated on the basis of discretionary individual agreements between the Minister of Health and State Governors or Municipal Mayors. In 1995, 50% of investment budgets were allocated according to population size. The MoH is interested in incorporating health and socioeconomic indicators as criteria for allocating the other half, beginning in 1996.

4. Delivery of health care

- 1.18 The Unified Health System (SUS) integrates the public health network with the private philanthropic and for-profit networks from which the Government purchases health care services. These services represent about 70% of total health services provided in Brazil. The balance of 30% is supplied by the private for-profit network that does not contract with the Government and serves patients who are privately insured or pay out of pocket. Patients are free to choose between public and private providers contracted by the SUS. The private sector plays an important role in providing services to SUS: In 1994, it accounted for 79% of SUS-funded hospital beds, 83% of publicly funded hospital admissions, and 66% (39% for-profit, 27% philanthropic) of hospital reimbursements (See Table I-2). The private sector also accounted for 38% of publicly funded ambulatory procedures and 65% of all ambulatory reimbursements. The quality of care is not well documented, but it is likely to be low, if we judge it by maternal and infant care, which are traditional health care quality tracers: although 83% of births were attended by qualified staff in 1989, maternal mortality is high, and 47% of infant deaths were due to perinatal causes.

TABLE I-2 SUS-Funded Reimbursements by Type of Provider		
Type of Provider	Ambulatory Care	Hospital Care
Private for-profit	37%	39%
Private Philanthropic	28%	27%
Public	27%	13%
University	8%	21%

5. Administration of public health services

- 1.19 The Ministry of Health has few responsibilities in direct health care provision, as ownership and administration of public services was decentralized to municipalities and states in 1988. Starting in 1982, successive administrations have decentralized both responsibilities and resources to municipalities and, to a lesser degree, to states. At present, about 2,000 of the 5,000 Brazilian municipalities have some degree of autonomy in health care. Decentralization has mostly benefitted municipalities, leaving State Health Secretariats with a relatively small and ill-defined role, lying between a strong Federal MoH and the Municipal Health Secretariats, over which they have no hierarchical authority, the latter tending to relate directly to the Federal level. Municipal Health Secretariats are responsible for planning, organizing, and managing public health care delivery in their jurisdiction, and can contract private providers to deliver the care not provided by the public network. When necessary, they can also form intermunicipal consortia ^{6/} to pool resources and better manage patient flows. Larger and better managed municipalities with advanced administrative and financial autonomy receive block grants which they are free to manage. It is anticipated that some states will have full autonomy, meaning that in addition to receiving the block grants, they will be entrusted with the responsibility for general public health functions such as communicable disease control, etc.

6. Provider reimbursement

- 1.20 Providers are reimbursed on the basis of production (diagnosis-related groups): Sistema de Informação Hospitalar (SIH) for hospitalization and Sistema de Informação Ambulatorial (SIA) for ambulatory care. Current reimbursement rates are far out-of-line with the average costs of service, seriously affecting investments and maintenance of facilities, causing shortages in essential inputs, and leading to poor quality of care and to fraud. Presently, it is estimated that they cover no more than 40 to 50% of real costs. Between 1991 and 1992, the average level of a SIH fell from US\$306 to US\$180. Furthermore, the deterioration of prices has been uneven across procedures and diagnosis. This distortion affects the reimbursement of essential clinical and public health services, while less cost-effective tertiary care has

^{6/} An intermunicipal consortium is an innovative idea that consists of regrouping several municipalities to create a critical mass of health care facilities embodying, for example, one tertiary-level university hospital, 2-3 secondary or regional hospitals, and related network of health centers and posts. The main advantages of a consortium are that: (i) it achieves economies of scale through the joint purchase of some key inputs; (ii) it can organize a meaningful reference system; and (iii) it improves the efficiency of the system by separating the financing (by the consortium) from the delivery of services (by individual facilities that would sell services to the consortium), and allowing the Federal and State levels to deal with a limited number of entities (the consortia) rather than a multitude of municipalities or individual facilities.

been relatively more protected. In addition, it provides a perverse cross-subsidy since the upper and the upper middle class use costly tertiary care disproportionately.

TABLE I-3 Reimbursement for Selected Procedures in the Unified Health System - SUS. Federation of Holy Houses of Mercy, January 1996. \$Reais			
Procedure	Cost	Reimbursement	Reimb/Cost
General medical visit	10	2	21%
Appendectomy	833	191	23%
Normal Delivery	235	114	48%
Asthma Crisis	399	204	51%
Simple XRay	7	4	57%
Treat. Prematurity	385	322	84%

- 1.21 The deterioration of prices has led hospitals and other providers to postpone investments in rehabilitation and equipment, cut maintenance; and/or close entire units, leaving the poor without recourse. It has also led to widespread fraud by providers requesting illegal co-payments from patients, tinkering fraudulently with patient diagnoses to maximize reimbursement, requesting more than one reimbursement for each admission and falsifying admissions. The MoH estimates that 20% of SUS billing is fraudulent. At present, the MoH is making an enormous effort to control fraud with existing resources and capabilities.

7. Regulation

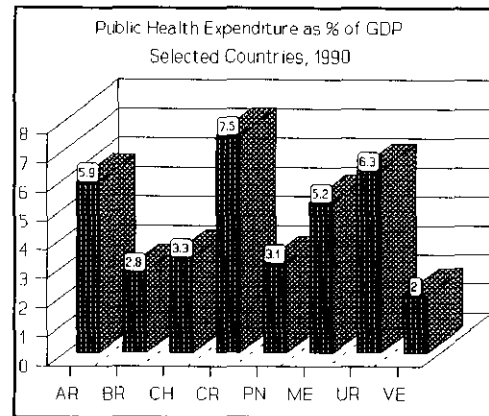
- 1.22 Although the Ministry of Health is responsible for policy and standards, it has not been able yet to adequately regulate the system: namely, to ensure the quality of services it purchases, and to control fraud. Though the Government has an information system that permits to detect some of the fraud, it has been unable to enforce the law, due to fear of massive closings and disruption of services. Also, the MoH still executes a number of vertical programs, including: (i) the National Health Foundation (FUNASA) (sanitation and communicable disease control); (ii) the Central Pharmaceutical Agency (CEME) (procurement, production and control of pharmaceuticals); (iii) the Oswaldo Cruz Foundation (FIOCRUZ) (post-graduate education, research and development, and vaccine production); and (iv) the National Institute of Food and Nutrition (INAN) that might be more appropriately managed at the State and Municipal levels.

8. Health care expenditures

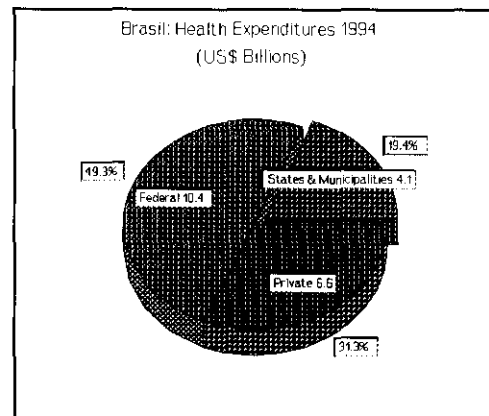
- 1.23 Public health expenditures at all government levels (federal, state and local) were about US\$19.1 billion in 1990, which represented US\$95,6 per capita and 2.76% of the country's GDP. Such a level of expenditure is much smaller than the amount spent by other upper middle-income countries in the region. Total health expenditures in Argentina, Chile, Costa Rica, Mexico, Uruguay and Venezuela range

from 1.96% to 7.5% of GDP. From those, only Venezuela allocates a smaller proportion of its GDP to public health expenditures than Brazil. In part because of the low public health expenditure, Brazil ranks last among the cited countries in life expectancy, infant mortality, maternal mortality, and coverage of immunization and prenatal care.

- 1.24 Public health budgets have been volatile. In 1990, the per capita public health expenditure was about US\$96 but it fell to a low of US\$63 in 1992 when the federal government's expenditures on social security benefits almost exhausted the funds which had been allocated to health. The 1992-1993 Social Security crisis led to the deactivation of many beds and to a significant reduction in hospital and ambulatory care, making management of the system extremely difficult. In 1993, total public health expenditures reached US\$14.89 billion, the equivalent of US\$93.80 per capita.



- 1.25 **Total health expenditures:** In 1994, we estimate that total health expenditures were about US\$21.1 billion, corresponding to US\$136 per capita ^{2/} and 4.4% of the Brazilian GDP. The distribution of the health expenditures between public and private entities was divided as follows: federal expenditures US\$10.4 billion, US\$67 per capita; states and municipalities US\$4.1 billion, or US\$26 per capita; and private expenditures US\$6.6 billion, or US\$43 per capita. The latter represented 30% of total expenditures, a high share even when compared with that of OECD countries, in spite of the fact that it only accounts for expenditures with private health insurance, pre-paid, medical cooperatives, and company-based health systems. Not included are out of pocket expenditures for private medical consultation, diagnostic tests, pharmaceuticals nor admissions, which, in 1989, were estimated at US\$2.9 billion (0.5% of GDP). If these were kept at the same level, total health expenditures in 1994 were of the order of US\$23.2 billion, equivalent to 4.9% of GDP, still somewhat low for a middle income country.

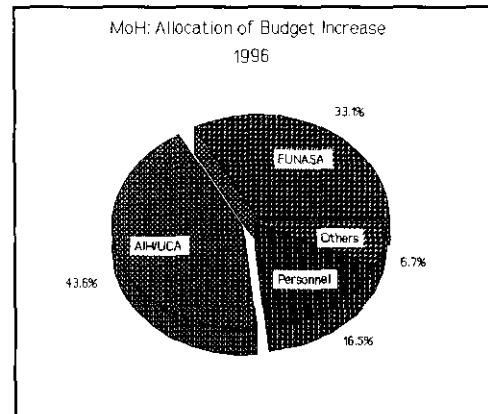


^{2/} Per capita figures include SUS and non-SUS MoH expenditures.

- 1.26 **State and municipal health expenditures:** States' net health care expenditures as a proportion of GDP declined substantially during the 80s and beginning of the 90s, dropping 15% between 1980 and 1990. During the same period, municipal health expenditures almost doubled their share, from 0.19 to 0.34% of the GDP. From 1985 to 1990, the proportion of health sector funds directly managed by states increased 43%, while those managed directly by municipalities rose 60%. In the beginning of the 1990s, municipal health expenditures have almost equaled those of the states. The increased role of Municipalities and the declining State responsibility were mandated by the new Brazilian Constitution, which redistributed a greater share of tax revenues to municipalities, and by the Collor administration policy of favoring Municipalities over States in the allocation of funds.

G. Proposed 1996 Federal Health Sector Budget

- 1.27 For 1996, the Ministry of Health has proposed a total budget of US\$23 billion, a 62% increase over the 1995 budget allocation. A total of 44% of the requested increase would be spent in raising reimbursement rates of hospital and ambulatory services and another 33% would be used to strengthen sanitation and communicable disease control by the National Health Foundation.



- 1.28 The proposed 1996 budget would allocate US\$12.5 billion (55%) to the National Health Fund, of which US\$9 billion (79%) would be used to reimburse public and private providers for hospital and ambulatory care provided under the SUS. Personnel (17%) and debt service (4%) constitute the second largest budget category, accounting for 21% of the total budget. The remaining budget would be used to finance federal health agencies: (i) 17% for the National Health Foundation (sanitation and communicable disease control); (ii) 5.4% for Central Pharmaceutical Agency (the centralized drug procurement agency); (iii) 0.9% for the Oswaldo Cruz Foundation (post-graduate education, research and development and vaccine production); and (iv) 0.16% for the National Institute of Food and Nutrition (nutrition surveillance and food distribution among the poor).
- 1.29 The largest relative increase would go for the National Health Foundation (FUNASA) (276%), mostly due to a twenty fold increase in the funds allocated to basic sanitation. The MoH also proposed higher than average increases for: (i) 177% for the Milk Program; (ii) 169% for the Social Pioneers Hospital (the Federal District

Hospital); (iii) 242% for Community Campaigns; (iv) 217% for the Rehabilitation and Re-equipment of the SUS network (including those under the proposed project); (v) 193% for Control of Endemic Diseases (including a new malaria control program); (vi) 256% for other National Health Foundation programs; and (vii) 110% for other National Food and Nutrition programs. Except for the direct funding of the Social Pioneers Hospital, all these proposed budget increases show the Government commitment to increasing its role in health promotion and disease prevention, which are traditional public goods.

- 1.30 The proposed budget increases for the National Health Foundation are questionable. The original weight of the National Health Foundation in the 1995 MoH budget and the massive increase in resources for 1996 does not seem justified because: (i) most of communicable disease control activities could be carried out more efficiently by states and municipalities and (ii) most of the increase will go to finance rural water and sanitation projects, which would be better provided and managed at local level, by private or municipal utility companies.
- 1.31 Equally, it is difficult to justify a federal agency such as the Central Pharmaceutical Agency (CEME) and the large increase in the appropriation of funds for the centralized purchase of drugs since: (i) distribution of free drugs to everybody in public health services is not financially feasible; and (ii) the Brazilian Central Pharmaceutical Agency (CEME) has a bad reputation in terms of efficiency and capacity to control fraud.
- 1.32 Finally, the size of the MoH payroll needs to be studied. Although the proportion of the MoH payroll (18% of the 1996 budget) is small when compared with that of other countries (it is normally around 60%), and in spite the fact that the proportion in 1996 would be smaller than in 1995 (19%), it is hard to accept a 53% increase from one year to another, when almost all health services are provided either by the private sector or by municipal or state hospitals and ambulatory services. Such increase would be at odds with the stated policy of making the MoH a small agency, with mostly normative, regulatory, and monitoring functions.
- 1.33 The increased allocation for the Milk Program can also be questioned on the basis of studies which have shown that it has been often ill-targeted, inefficient and abused. The REFORSUS proposed would not address the problem because: (i) it represents a relatively small part of the budget; (ii) it is somewhat peripheral to the focus of the project; and (iii) it is in large part outside the realm of the MoH (i.e., it is part of the Comunidade Solidaria Program, coordinated from the Cabinet of the First Lady).
- 1.34 The 1996 MoH budget shows reduced allocations in some items, including: (i) amortization of debt service (57%); (ii) vaccine production (29%); and (iii) counterpart funds for projects in 1996

(i.e. IBRD supported NE Basic Health 1, NE Endemic Disease Control and Amazon Basin Malaria Control projects). The reduced contribution to vaccine production represents a new policy towards an increased reliance on private sector production and on purchases in competitive international markets.

H. Health sector issues and government policy

1. Health sector issues

- 1.35 Despite the impressive degree to which the Brazilian health care system coincides with good organizational and financial models, it has a number of significant failings described hereunder. Some of these failings can be tackled in the short-term within the current institutional arrangements, while others are structural and can only be fixed in the medium term.

a. Short term problems

- 1.36 The main short-term problem is that reimbursement of private providers is far out of line with the average cost of services, and the Government has often significant arrears. Due to underfinancing, philanthropic hospitals, which are the backbone of the SUS, are closing entire units, going out of business or canceling their public service contracts, while public hospitals are left decaying and without essential inputs, leaving the poor without recourse to health care. Underfinancing has been endemic in the past six years, and has led to a lack of investment and maintenance of capital, leaving many civil works projects unfinished. These projects, if not completed, will deteriorate and their sunken costs will be lost. In addition, the present reimbursement schedule overcompensates some non-cost-effective tertiary interventions used by the more affluent while it leaves more cost-effective essential public health and clinical interventions seriously undercompensated.

b. Structural problems

- 1.37 There are five structural problems in the SUS (see Table I-4). First and most important, the current Constitutional mandate to pay for all health services for the entire population is not sustainable: the present level of public health expenditures (US\$93 per capita and 3% of GDP in 1994) is insufficient to pay for a comprehensive list of health benefits, for the 76% of the population which rely exclusively on the SUS. With the cost of the more modest private health insurance benefit package, it would cost US\$15 to 20 billion if it would be offered to the 110 million population that presently depends solely on SUS. Currently, rationing is achieved by ceilings on services and budgets, which is highly inefficient and inequitable, as the better-off are more successful in breaking waiting lists and in harnessing the system's scarce resources. In spite of tight budgets and restrictions to

access, middle and upper-class private insurance beneficiaries continue to use the SUS free-of-charge.

TABLE I-4 Failings of the Health Care System (SUS) Today	
Financing	Public financing is low to provide the typical Middle income country health benefit package; Financing is very unstable, varying by as much as 50% over very short periods. Prices paid to providers are too low to cover costs, maintenance, depreciation and innovation, prices are distorted and do not provide incentives to allocative efficiency; there are even perverse incentives to produce services of low cost-effectiveness There is no coherent investment policy, particularly in equipment. Federal transfers to states and municipalities do not take into consideration epidemiological profiles nor differences in income. Public health services do not recover any costs from insurers for privately insured patients, there are no copayments, deductibles, moderation fees, or any charges for comfort services. Individuals and enterprises are allowed to deduct insurance costs from income for tax purposes.
Competition	Public providers are at an advantage because, in addition to receiving payment for services provided, they receive extra budgets for salaries and other inputs. Although, patients are free to choose among public and private providers, they do not have access to information on quality which would allow them to make a better informed choice.
Regulation	Private insurers are not regulated and use adverse selection. Quality of care provided by the private sector is not monitored or controlled, even when it is paid by SUS. Auditing and governance control for both private and public providers is ineffective.
Autonomy	Many Municipalities are too small and lack the administrative structure to take health sector responsibilities; conversely, States have taken too little responsibility in health sector planning, management and financing. Public health services lack autonomy and are directly managed by Municipal and State governments.
Management	Public health services are short in professional administration and adequate management systems, and lack incentives for internal efficiency. Private hospitals under contract are also often poorly managed.

- 1.38 Second, chronic under-financing has led to deterioration of facilities, shortages in essential inputs, and poor remuneration of professionals, leading to inefficiency, to poor quality of care, to a demoralized workforce and to fraud. Since 1987, capital investments in the health sector dropped by 37%. Hospitals are generally more deteriorated than health centers and posts. A large part of their basic equipment is in disrepair, including key items, such as: X-Ray machines, anesthesia carts, operating room lighting, boilers, laundry, and kitchen appliances. Many hospitals also suffer from deterioration of their physical plant, including plumbing, cooling, sanitary systems, and air conditioning. These bottlenecks in turn reduce productivity (i.e. excessive lengths of stay and increased costs), and quality of care, and pose safety hazards to both staff and patients (i.e. radiation leaks, hospital infections, etc).

- 1.39 Third, the Federal Government has not been able to adequately regulate the private sector in order to control adverse selection, the quality of services it purchases, and to control fraud. Despite the major role of the private sector in both health care delivery and financing, regulation often does not exist or is poorly enforced. The quality of care is inadequate as it can be judged by the hospital fatality rate, which has been increasing since 1991, to reach the highest rate in ten years: 2.36%.
- 1.40 Fourth, health care financing is still excessively centralized at the federal level, imposing a heavy burden on the federal budget and failing to address local needs adequately. Reimbursement of providers only constitutes 49% of the MoH budget, a very low proportion, if one considers that the Ministry has very few health care provision responsibilities. Federal agencies such as the National Health Foundation and the Central Pharmaceutical Agency, whose functions could be for the most part decentralized, still consume 25% of the federal health budget resources. While the Constitution has passed down significant responsibilities to small and unprepared Municipalities, it has not defined exactly the role of States, creating overlapping in the area of planning, leaving serious doubts as to how the system will be financed and controlled.
- 1.41 Fifth, public sector and many philanthropic hospitals are poorly managed, with: (i) inadequacy of inputs (i.e., human resources are heavily physician biased); (ii) above average market prices for equipment expenditures; (iii) widespread absenteeism reflected in low staff productivity; (iv) narrow levels of hospital management autonomy; (v) accountability problems (managers are commonly appointed on the basis of political criteria); and (vi) underdeveloped quality assurance programs.

2. Government health sector policy

- 1.42 As soon as the Cardoso Government took office in January 1995, the Minister of Health sought Bank's assistance to respond to the health care crisis already described herein. The dialogue which ensued led the Government to prepare the proposed project with health policy initiatives to introduce structural adjustments in the areas of financing, management and investment through: (i) ensuring adequate compensation to health care providers and the elimination of arrears to keep philanthropic providers from leaving the public health system; (ii) protecting the system from further deterioration of assets; (iii) matching the system with revenue constraints; (iv) reducing fraud; (v) improving quality of care; (vi) improving equity of resource allocation; and (vii) controlling costs. Specific measures are described ahead in Chapters II and III.
- 1.43 If the SUS Reform Program is successfully implemented, by the year 2000: (i) System coverage would continue to be universal; but (ii) the scope of health benefits financed under the SUS would be

compatible with health sector revenues, and would favor more cost-effective interventions; (iii) financing would continue to come mostly from taxation, subsidizing the poor, but states and municipalities would take more responsibility, private insurers would be called to pay for services provided to their beneficiaries under the SUS, and would not be allowed to skim beneficiaries; (iv) the allocation of capital and recurrent health care budgets to States and Municipalities would be mostly automatic and based on transparent, equity generating formulas, which would include income, health and supply indicators; (v) private providers would continue to be the backbone of public health care provision, but would be more accountable for the quality of services provided; (vi) public hospitals and ambulatory services would be given administrative and financial autonomy and be forced to compete with private sector providers; (vii) reimbursements would be enough to maintain capital, and be used as incentives to promote cost-effective interventions and (viii) the Ministry of Health would keep the core of policy setting, regulation and financing, while shedding non essential functions.

- 1.44 Beyond the reforms herein described, there are still two important policy challenges to be addressed by SUS in the medium/long-term: (i) the introduction of an improved system for provider's reimbursement (i.e. capitation systems for groups of well defined interventions allowing for regional differences); and (ii) the expansion of coverage while achieving the highest health gain possible (the project advances on this direction by financing the Burden of Disease and Cost-Effectiveness studies to aid the future technical definition of a better defined group of interventions to be delivered and financed by SUS).
- 1.45 The government is planning a 10-year health sector reform program and this project brings partial solutions to described shortcomings. The present project becomes the first of a series of two or three overlapping projects for the correction of described problems while preserving and improving the desirable features of the Brazilian Unified Health System.
- 1.46 If such policy reforms are implemented, the SUS can evolve toward a more efficient, equitable and higher quality medical care system.

3. Government health sector decentralization policy

- 1.47 Whereas REFORSUS is not a decentralization project, its implementation will be inserted within a health sector decentralization process already underway in Brazil. Introducing more autonomy into the health system has resulted in greater flexibility in resource allocation at the local level. Indeed, as part of the decentralization process, the Federal Government allowed states to determine, how they can allocate federal resources between ambulatory and hospital care. As a result, hospitalization expenditures have decreased and ambulatory expenditures increased. This signals a shift on the part of the

states toward emphasizing ambulatory care, with possible savings for the system and more efficient use of resources.

- 1.48 The MoH has presented to the Government a proposal for new regulation governing the decentralization process in the health sector. The "Norma Operacional Básica" 1996 (NOB/96) improves the degree of autonomy of municipalities and states. The decentralization process is moving towards achieving more coherence between different levels of government. Planning and programming at the state level must take into account municipal plans, and the process of revision and approval of plans and programs comprises all three levels of government (federal, state, and municipal).
- 1.49 Financial resources available for the provision of ambulatory and hospital services are bound to pre-set ceilings (global budgets) for each estate and municipality; the state ceiling comprises all the financial ceilings for its respective municipalities, irrespective of their own degree of autonomy. Proposed state and municipal budgets must be presented to the State Health Secretariat - Secretaria Estadual de Saúde (SES), and all levels of government participate in their approval. More importantly, transfers of global budgets are subject to agreements of compliance with specific administrative, financial, and managerial autonomy conditions established by law.
- 1.50 There is no unique method to determine hospital care budget ceilings; some states use a programming exercise of expected number of hospitalizations times an average hospitalization charge Autorização de Internação Hospitalar (AIH), based on past observations; others, use an estimate of health care coverage, etc. These methods of in-patient care resource allocation tend to favor municipalities or states where more specialized care is offered, where its case mix makes the average AIH higher than in those where the emphasis is away from the delivery of highly specialized care. In the case of ambulatory care, the programming exercise is almost always based on historic patterns; only the states of Paraná, Pernambuco and Minas Gerais had recently introduced a system for ambulatory care programming. At present, Mato Grosso, Alagoas and São Paulo are working on designing their own methodology.
- 1.51 Financial ceilings for hospitalization have been reduced from 10% to 9% of the population during the first semester of 1995. The process was done gradually correcting differences between the estimated ceiling and the actually delivered level of hospitalizations between January and June of 1995. Moreover, state budget ceilings have been frozen; at present, only under special circumstances, special exceptions are allowed. States are permitted to spend more than their allocated ceiling with a margin of 5% in the South and 12% for states in the Northeast. These margins account for variations on emergency care, medicines and new health programs. The MoH applies these rules to provide incentives through programming exercises and efficiency in the use of resources.

- 1.52 The NOB/96 proposes that the financial resources for decentralized activities such as epidemiological surveillance, disease control, and public health actions, be transferred to states as global budgets.
- 1.53 Investment budgets have been allocated by a process of negotiation only. However, during 1995, 50% of investment budget levels corresponded to state population levels; at present the MoH wants to adopt this measure for investment budget allocation. The other half should give space for negotiation at the "Tripartite" and also should be allocated with respect to economic and health indicators. REFORSUS develops a formula to distribute investment funds among states based on economic indicators such as income per capita, health and other indicators. This will prevent from discriminating against poorer states and will give them the opportunity to present investment project proposals before funds are depleted by the rapid participation of more advanced states (see par. 3.8).
- 1.54 The process of health care resource transfer to states and municipalities responds to their achieved level of autonomy. Federal grants to "Municipios prestadores", which do not have autonomy, go directly to the state according to its own level of autonomy; otherwise, the federal government pays providers directly. Municipalities "gestores" can receive three different types of block grants: (i) Municipalities "gestores" of basic ambulatory care can receive the Plataforma Ambulatorial Básica (PAB) Basic ambulatory care floor. The PAB is a block grant transferred to municipalities under specific management agreements and consisting of a capitated value for a limited group of ambulatory interventions; PAB grants are 25% of total health service expenditures and 50% of total ambulatory services. It corresponds to a monthly capitation of \$1 per individual; (ii) The Fração Assistencial de Referência (FAR) is a block grant transfer based upon a programming exercise approved by the Bipartite, and includes surgical ambulatory care and more complex diagnostic procedures than those in PAB; and (iii) payments for high cost ambulatory interventions and hospital care (AIH and SIA/SUS) can be transferred as a global budget for ambulatory and hospital care, based on the programming exercise approved by the Bipartite, Tripartite and SAS. Payments correspond to the minimum reimbursement rates defined in the MoH.
- 1.55 The decentralization process in the NOB/96 is proposing the level of MoH reimbursement rates to be used as floor prices, giving states and municipalities the flexibility to introduce differences over those minimum levels according to regional priorities and to be financed by local resources. While the decentralization process will introduce more accountability, financial and administrative improvements, it can also mitigate the differential price effect that REFORSUS is proposing for increasing coverage of a "list A" of highly cost-effective interventions. Unless "management contracts" required for block grant transfers become "binding instruments", the delivery of highly cost-effective interventions could be

"crowded out" by less cost effective, more expensive and more specialized care. This is because if states and municipalities had the possibility of changing prices over the minimum level set by MoH they could change relative prices with local resources favoring specialized care.

I. IDB and World Bank strategy

- 1.56 The proposed project is consistent with the recently proposed general IDB's strategy for the social sectors, document CP-1029 approved by the Programming Committee on May 1st of 1996, and with Bank's strategy for the health sector in Brazil as described in the Country Paper, document CN-1897, presented to the Board of Executive Directors in February of 1996. In the light of the Eight Replenishment, the Bank's strategy for the social sectors insists on supporting the government in addressing major sector deficiencies and promoting long term efficiency and equity goals, with emphasis on improving the quality and coverage of decentralized services for urban and rural low-income populations, in partnership with local communities and civil society.
- 1.57 The general IDB's strategy for the social sectors emphasizes the importance of: (i) defining objectives clearly; (ii) improving resource allocation with emphasis in budget flexibility and adequate management; (iii) approaching decentralization with caution; and, (iv) to assess reform readiness in existing institutions. The IDB's strategy for the health sector in Brazil seeks to: (i) introduce mechanisms that contribute to alleviate distortions in SUS; (ii) increase efficiency of health service delivery and promote the delivery of cost-effective interventions, including preventive care; (iii) strengthen administration of health service delivery at state and municipal level, improving their managerial and financial capacity to deliver health care services; (iv) strengthen the capacity of the Federal Government and the states for improving quality of care; (v) improve fiscal transfer mechanisms that incorporate criteria for equitable distribution of resources. The project is consistent with both the general and the specific strategy for Brazil, as explained in more detailed in Chapter II (paragraph 2.12).
- 1.58 The Brazilian Government has presented a single project for parallel financing by the World Bank and IDB, the project is consistent with the most recent economic analyses of the health sector in the World Bank, generally (1993 World Development Report), and in Brazil (The Organization, Delivery, and Financing of Health Care in Brazil, Report 12655-BR, and Private Sector and Social Services in Brazil: Who Pays, Who Delivers, Who Finances, Report 13205-BR) particularly with respect to the problems of underfinancing, inequity, inadequate regulation, fraud and poor quality of medical care.
- 1.59 The project is also consistent with the IBRD's strategy for the health sector, as described in the Country Assistance Strategy for

Brazil (CAS). In health, the IBRD's goal is to help the Government (i) improve the management, financial viability, and quality of public health care systems which serve the poor; (ii) carry out its role as a provider of public goods; and (iii) encourage investments for underserved and vulnerable groups. In the CAS, a health reform loan is considered of sufficient priority to be included in the Bank's portfolio, even under the pessimistic case of high inflation and low overall lending.

II. PROJECT CONCEPT AND COMPOSITION

A. Project objective

- 2.1 The project's main objective is to expand and improve the delivery of care under the Unified Health System (SUS), which is the sole source of care for the poor, through investment in infrastructure rehabilitation and equipment, parallel to the introduction of policy reforms which would improve the financial sustainability, equity, efficiency and management of the SUS.
- 2.2 In the short-term, all SUS arrears would be eliminated, reimbursement rates would be raised to a level sufficient to keep philanthropic providers in the SUS and to meet the operating costs of SUS ambulatory and hospital services, and fraud would be controlled.
- 2.3 In the medium and long-term the project would: (i) ensure adequate compensation to health care providers, by establishing reimbursements rates which would be enough to maintain and replace capital; (ii) protect the system from further deterioration of assets; (iii) match the system with revenue constraints, by establishing cost recovery from the privately insured and selecting a number of more cost effective interventions to be financed under the SUS; (iv) reduce fraud and improve quality of care, by establishing systematic audit and periodic accreditation of hospitals and quality assurance systems; and (v) control costs by adopting global budgets for states and municipalities.
- 2.4 To expand and improve the delivery of care, the Government would launch a series of investments in four priority areas: maternal & child health, emergency care, blood bank network and public health laboratories. REFORSUS will finance investment subprojects to: (i) rehabilitate and equip hospital and ambulatory services from the public and private non-profit SUS network; (ii) establish 2,500 family health teams to cover 10 million people in the poorest or more isolated areas, introducing changes in the health care delivery model, improving community outreach and emphasizing preventive care; and (iii) to improve management capacity.

B. Components and activities

- 2.5 The project would last four years and would have two components: (i) an investment fund to support rehabilitation, equipment and management systems for hospitals and ambulatory services; and (ii) institutional development in areas which are critical to the success of the investment, principally the strengthening of the capacity of the MoH and the states and municipalities in their role as health care purchasers.

2.6 Component I - Improvement of Health Care Delivery in the Unified Health System (SUS). (US\$626.4 million equivalent) The component would improve access, coverage, and quality of care delivered under the SUS, which is the only source of care for the poor. The project would finance subprojects proposed on a competitive basis by public and philanthropic health care providers, including states, municipalities, Non-Governmental Organizations (NGO), and community-based organizations. The project would finance subprojects in the following areas:

- (1) Rehabilitation and equipment to impede further deterioration of the infrastructure and recover the technological deficit caused by years of underfinancing, poor management and lack of maintenance. The project would not finance new construction except in new settlements where there are no facilities, either public or private; and when it is matched by a parallel reduction of capacity at other sites. The project would also finance subprojects to consolidate underused hospitals and ambulatory facilities in viable integrated institutions, and subprojects to transform facilities in institutions with higher capacity to resolve health problems. Equipment purchases would be justified on the basis of (i) restoring the systems' capacity; (ii) putting idle complementary resources back into use; or (iii) reducing the cost of an intervention already being provided. It is estimated that 55% of project resources would be used in the rehabilitation of ambulatory care facilities and 45% in restoring the capacity of hospitals. The project will finance investment in the public sector regional hospitals that were left unfinished during the fiscal crisis of 1992-1993, which are important referral centers. Required investments in higher cost equipment will be analyzed case by case by the MoH, and a maximum of 10% of the resources in this component will be spent on these. To ensure that investments in public health facilities do not use up all investment resources, the MoH has preassigned 25% of those funds to private non-profit facilities.
- (2) Management and maintenance development to improve health care administration. The funding of rehabilitation and equipment subprojects would be subject to the satisfactory implementation of key management systems: (i) cost accounting; (ii) billing and cost recovery; (iii) minimum quality standards for maternal care and hospital infection; and (iv) safe handling of hazardous materials. Forty percent of the total subproject costs would be made available upon approval; the remaining funds would be available depending on the satisfactory implementation of the mentioned management systems. Other key management improvements include: (i) the signing of a management contract; (ii) the establishment of a hospital board; (iii) the adoption of management information systems covering key sectors such as accounting and billing, personnel, pharmaceuticals and medical supplies, maintenance, clinical filing, patient flow and referral, laboratory and

imaging; and (iv) the use of evaluations, reviews, and other quality assurance systems. The project would also develop the legal instruments to grant financial and administrative autonomy to public health care institutions (i.e. independent trust status). At least 15% of investment project costs should be allocated to management improvement, up to US\$500,000.

- (3) Family Health and Health Promotion Subprojects to improve accessibility and outreach in underserved areas, and avoid the overload of secondary and tertiary care. The project would finance about 2,500 family health and community health workers' subprojects, health promotion and disease prevention subprojects to cover 10 million people who live currently in poor areas and have no access to health care. Subprojects will provide emphasis on the delivery of a basic package of cost-effective clinical and public health interventions. Any investments in infrastructure rehabilitation and equipment for basic health units, will be parallel to the implementation of a family health and promotion subproject in that area. With the new NOB/96 basic health services are going to be financed by a block-grant calculated on the basis of a capitation (Plataforma Ambulatorial Básica - PAB).

- 2.7 In a typical family health program, municipalities would contract the provision of essential clinical and public health services to family health cooperatives, community-based organizations, or to NGOs. The latter would hire family health teams, with flexibility on the professional composition of the teams, according to the type of family program the community finds more appropriate to be implemented in their particular setting. A group could include one family physician, one nurse or auxiliary nurse, other teams could include social workers and psychologists and five community health workers per 1,000 families or 4,000 people. Family health contracts in turn would include: health education; epidemiological surveillance; prenatal and infant care; immunization; school health; general clinical care; and referral to and follow-up in specialized care. Supervision, on the job training, and continuing education would be ensured by selected reference hospitals and medical schools.
- 2.8 During the life time of the project, investment resources allocated to subprojects which emphasize the provision of the most cost-effective interventions, within the four priority areas defined by the government, will be considered a priority. Priority areas will be revised every year. For unfinished civil works, subprojects would exclusively finance regional hospitals with the four basic specialties, which are necessary and justified referral centers. Those investments would also prioritize the improvement of the capacity for the delivery of most cost-effective interventions.
- 2.9 Component II - Improvement of Health Care Financing and Regulation (US\$60 million equivalent). This is an institutional development

component that would bring support to the government reform initiatives through technical assistance and consulting services necessary for their development. It would focus on the following areas critical to the sustainability of the proposed investments: (i) adequate framework for pricing and reimbursing health care providers; (ii) emphasis on a sustainable list of health benefits and differentiated reimbursement schedule favoring more cost effective interventions; (iii) cost recovery for the privately insured, and a better control over the quality of services and fraud; and, (iv) control federal public health expenditures and improve equity of resource allocation; and, (v) decentralization.

- 2.10 The project will finance technical assistance including consulting services, and epidemiological, institutional, economic, legal, and other studies. It would also support consensus-building and dissemination of activities such as publications, workshops and seminars, study visits, and training. This component will include the following:

- (1) Improving the financial sustainability of the SUS. The project would match the system to the resource constraints in an efficient and more equitable way. The project would:
 - (a) ensure adequate compensation to health care providers, so health care service delivery prices cover costs by establishing a system to monitor the costs of health care on a continuous basis, and by maintaining permanently the Chamber of Health Care Prices for regularly negotiating the prices charged for health care (see Policy Matrix, commitments B1, C1, and D1);
 - (b) protect against further deterioration of the SUS' capital assets, by deciding on priority investments and necessary reimbursement levels on the basis of annual reviews of budget resources available for the SUS (see Policy Matrix, commitments B4, C4, and D4);
 - (c) match the SUS with resource constraints by emphasizing the delivery of a sustainable group of health benefits, developing a differentiated reimbursement schedule favoring more cost-effective interventions in a List A (Priority 1), accounting for at least 30% of output. Reimbursement of List A interventions would be adjusted to cover full operational, maintenance and capital costs. Reimbursement of List B (Priority 2)- including a group of medium cost effective interventions, would eventually cover 75 to 85% of costs, depending on the availability of resources. List C (Priority 3) of less cost effective interventions would be adjusted by inflation (see Policy Matrix, commitments B3 and C3). The project will also carry out burden of disease and cost effectiveness studies.

- (d) developing new and more stable health revenues, including the introduction of cost recovery for care provided to privately-insured patients under the SUS, if proposed legislation is approved; and, develop systems to improve present fraud control efforts (see Policy Matrix, commitments B5).
 - (e) control costs and reduce health care inflation by: (i) establishing global health budgets for states and municipalities (see Policy Matrix, commitments B7, C7, and D7); and, (ii) establishing a mechanism to evaluate and manage the diffusion of new technologies in the SUS (as reflected in the eligibility criteria for equipment subprojects).
- (2) Improving MoH capacity to regulate, evaluate and control. The project would:
- (a) Reduce fraud by: (i) maintaining and developing the National Audit System at the Federal, state, and municipal levels; (ii) upgrading the management information system for reimbursements to produce automatic reports on "outliers"; and (iii) enforcing penalties and corrective measures when required (see Policy Matrix, commitments B6, C6, and D6);
 - (b) Enhance quality of care by adopting and disseminating standards for maternity care, for the control of hospital infections, for monitoring and reducing hospital mortality and for safe handling of hazardous medical waste and material. The implementation of the specific measures to reach those standards will be required through the eligibility criteria for investment subprojects.
- (3) Improve autonomy. Promote and support decentralization to strengthen the capacity of states and municipalities to act as health care administrators and purchasers, to reduce the share of federal responsibility in the health system, make services reflect better the needs of beneficiaries, achieve better accountability and control, and avoid the high overheads associated with the present centralized approach. With the project the MoH would:
- (a) provide increased access to funds to municipalities and states which achieve higher levels of autonomy. Investment projects will be eligible only in those states and municipalities with some degree of autonomy and provide technical assistance for those with not yet granted autonomy level;
 - (b) grant and support increased financial and administrative autonomy of states and municipalities. By the end of the project at least 13 states and 1200 municipalities would

have partial autonomy, at least 8 states and 400 municipalities would have advanced autonomy; and at least 4 states would have full autonomy, including that of managing communicable disease control and procurement of pharmaceuticals. Autonomous states and municipalities would receive automatic health sector block grants, which they would be free to manage; 60% of federal health resources would be transferred automatically to states and municipalities as block grants (see policy Matrix, commitments B7, C7, and D7);

- (c) establish a system for transparent and equitable allocation of resources to states and municipalities, including the adoption of formulas to automatically allocate recurrent and investment budgets on the basis of income, health indicators, supply indicators, and management indicators (see Policy Matrix, commitment B8); and
- (d) support the development of intermunicipal consortia and integrated health systems among small municipalities, to pool risk and resources, and to gain economies of scale.

C. Linkages between components

- 2.11 The investment loan (Component I) would be linked to the reform program (Component II) in several ways. First, by the insertion of indications of the implementation of specific reforms as eligibility criteria for investment subprojects. In fact, the approval of all subprojects will be subject not only to specific criteria related to the type of the investment but also to general eligibility criteria aimed at: (i) promoting decentralization and autonomy by investment subprojects being eligible only in those states and municipalities with some degree of autonomy; (ii) enhancing quality of services by requesting that all subproject proposals include formal commitments to implement specific measures to reach adequate standards for, among others, maternity care, control of hospital infection, and safe handling of hazardous materials; and, (iii) fraud control measures.
- 2.12 Second, investments would also be linked to the reform program through: (i) the MoH adopting reform initiatives before negotiations and presenting evidence of fulfilled commitments at negotiations (Annex II-1); (ii) the Banks conditioning resource commitments for new subprojects to the satisfactory adoption by MoH of policy reforms (see Annex II-1 and paragraph 3.32); and, (iii) yearly agreements on the financial requirements of SUS and on the satisfactory execution of the previous year's SUS budget and investment program.

D. Program's consistency with IDB's strategy

2.13 Project design responds to the IDB's strategy in the sector as described in Chapter I (paragraph 1.59), through several activities as follows:

- (1) REFORSUS is expected to reduce distortions in SUS provider reimbursement tariffs by adjusting to levels sufficient to cover the costs of service provision. It also supports the introduction of cost recovery measures from privately insured SUS patients, pending the approval of appropriate legislation. With the legislation approved, the project would finance the implementation of the information system required to enforce the measure. It would also finance the training to manage and monitor the system. Also, the project will assist in the design and implementation of information systems to control fraud, a necessary initiative that will improve the efficiency of federal health spending. It will also seek to promote an equitable allocation of investment resources.
- (2) The project will support financial and administrative flexibility for states and municipalities receiving block grant transfers to pay for health service delivery. The project emphasizes the importance of increasing the proportion of federal budget resources transferred as block grants. REFORSUS approaches decentralization with caution, providing technical assistance to municipalities and states emphasizing the improvement in managerial, planning and administrative capacity of state and municipal local governments. Reinforcing the planning and programming skills needed for decentralization is necessary to make it a meaningful process for improving health service delivery. The assistance will also seek to strengthen local governments' ability to apply for investment grants.
- (3) REFORSUS will promote the approval of investment projects that enhance health providers' ability to deliver most cost effective services. Further, by supporting the adoption of changes in reimbursement tariff policies, the project will seek to emphasize the delivery of cost-effective interventions including preventive care.
- (4) REFORSUS supports the design and implementation of a quality assurance program the MoH has already started. The project will insist on the implementation of such measures through the eligibility criteria for investment sub-projects and through the evaluation of specific quality assurance indicators.
- (5) REFORSUS will provide technical assistance for those municipalities and states that desire to increase their level of autonomy but can not comply with the necessary requirements by the MoH. The project will help municipalities and states to improve their ability for designing and implementing management contracts associated with REFORSUS investment grants, and with

Federal government block grant transfers. Furthermore, REFORUSUS insists on the importance of global budgets accounting for a gradually increasing portion of federal transfers to states and municipalities. By the end of the project, 60% of federal transfers to states and municipalities will correspond to global budgets.

B. Project cost and financing

1. Project cost

2.14 Total project cost is estimated at US\$750 million equivalent. A breakdown of the project's costs is summarized below.

TABLE II-1 Project Costs and Financing Plan (US\$ millions)					
	IDB	IBRD	Local	Total	%
1. Administration and supervision	23.1	12.0	---	35.1	4.7
2. Direct costs	323.4	263.0	100.0	686.4	91.5
2.1 Health care Delivery	293.4	233.0	100.0	626.4	83.5
2.1.1 Rehabilitation works	137.3	121.0	52.0	310.3	41.4
2.1.2 Equipment	127.4	112.0	---	239.4	31.3
2.1.3 Management and maintenance	28.7	---	---	28.7	3.8
2.2 Health care financing and regulation (institutional development)	30.0	30.0	---	60.0	8.0
3. Contingencies	---	25	---	25	3.4
4. IDB's inspection and supervision	3.5	---	---	3.5	.4
TOTAL	350	300	100	750	100.0
Percentage	46.7	40.0	13.3	100.0	

2.15 The cost estimates and average size of each subproject reflect a consensus of sector specialists and the experience accumulated by the Borrower during its survey of State and municipal health sector rehabilitation needs. The project is expected to finance about 1,500 sub-projects over four years in 26 states, i.e. 300 sub-projects per year. This value seems realistic when compared with the capacity of the MOH, the state health secretariats, Banco do Brasil and the BNDES. The miscellaneous administrative costs (PMU's and RPMU's set up and operation, also BB's and BNDES' management fees), consulting services (including supervision, audits and ex post evaluations) and maintenance of equipment purchased with the proceeds of the loan, are based on the average cost of technical assistance provided by UN agencies and on prevailing market costs of consultants and training services in Brazil.

2. Financing plan

- 2.16 The proposed IDB loan of US\$350 million equivalent would represent 46.7% of total project costs. Local beneficiaries, including municipal and state public health agencies, philanthropic health care providers and community-based organizations, would contribute US\$100 million (13.3% of total project costs).
- 2.17 The IBRD would finance the project in parallel with the Bank, with a loan of US\$300 million equivalent, which would represent another 40% of the total project cost. The Borrower would propose subprojects to be financed by each institution, but would ensure that disbursements occur in parallel, so that at any point in time the proportion of funds disbursed by each co-financier would not vary by more than 10%.
- 2.18 The proposed loan would be granted under the following terms:

Loan amount	US\$350 million
Amortization period	25 years
Disbursement period	4 years
Commitment of resources	3.5 years
Interest rate	variable
Inspection and supervision	1%
Credit fee	0.75% undisbursed resources

III. INSTITUTIONAL ARRANGEMENTS, IMPLEMENTATION AND MANAGEMENT

A. Project management and coordination

- 3.1 The project will be coordinated by the MoH, which will establish a central (federal) Project Management Unit (PMU) and three Regional PMUs (RPMU). The MoH will enter into an agreement with the Banco do Brasil (BB) and the Banco Nacional de Desenvolvimento Econômico e Social (BNDES), which will manage all contracts and financial transactions. The PMU will respond directly to the Minister of Health, and will provide technical assistance to the States and to the Tripartite Management Committee (CIT), comprised by the Minister of Health and representatives of State & Municipal Health Secretaries.
- 3.2 The PMU will: (i) ensure the efficient management of the project, including maintaining project records and preparing regular implementation reports; (ii) maintain a data base of standard unit costs for civil works, equipment, and consultants; (iii) contract financial and procurement audits and ex-post evaluation; (iv) implement Component II - Improving Health Care Financing and Regulation; (v) appraise projects estimated to cost more than US\$1 million ; and (vi) supervise regional project management units (RPMUs).
- 3.3 To carry out these functions, the PMU will staff 3 small units (Operations, Financial Management, Policy Support & Studies, with a total staff of the order of 25), and will rely on the project management services to be provided by Banco do Brasil and BNDES for the investment component and by the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) for the implementation of Component II 8/.
- 3.4 The Operations group (5-6 professionals) will support project promotion and evaluation, interfacing with the RPMUs, the proponents and BB and BNDES. The Financial Management Unit (10-15 professionals) will be the centerpiece of contracting (agreements with States, municipalities and philanthropic entities receiving project monies), procurement, disbursement management, and meeting reporting requirements of the Banks, among other responsibilities. The Policy Support Group, in addition to overseeing the terms of reference of the different studies to be contracted out by CNPq, will be responsible for analyzing & assimilating the results of these studies, advising and assisting the Secretário de Assistência da Saúde and the Minister of Health in the development and adjustment of related health sector policies.

8/ CNPq was established in 1951 as an decentralized agency of the Ministry of Science and Technology. CNPq's main objective is fostering scientific and technological development through human resources development and research support.

- 3.5 The RPMUs will: (i) inform potential beneficiaries of project eligibility and evaluation criteria; (ii) provide or contract technical assistance for subproject preparation; (iii) appraise subprojects and prepare the corresponding appraisal reports; (iv) monitor and/or contract the supervision of subproject implementation; and (v) maintain adequate records on the respective subprojects.

B. Operational guidelines

- 3.6 Project implementation will follow operational regulations set forth in the Operational Manual agreed upon with the MoH. The Operational Manual defines the project cycle, management structure and procedures for the identification, preparation, submission, processing, and appraisal of subprojects, as well as the cofinancing, and implementation arrangements. As a condition prior to first disbursement, the Borrower, through the MoH, shall submit evidence that the Operational Manual has entered into effect.
- 3.7 The PMU will publish a series of competitive calls for proposals by region and type of subproject. All eligible participants, that is, State Health Secretariats, municipalities, inter-municipal consortia, and philanthropic health care providers, community based organizations and NGOs will prepare and present subproject proposals.
- 3.8 In order to ensure that more developed regions do not take up all available funds, the MoH will annually review and define ceilings for investment resources to be allocated by state on the basis of: (i) population; and (ii) the value of services delivered by public and non-profit sector by state, as compared with those delivered in the state where health expenditure is the highest. Poorer states and municipalities with less than average social and health indicators, and with poor capacity, presenting few subprojects than what would be expected, would receive technical assistance to prepare subprojects. Final formula and resource distribution results by state will be presented at negotiation. Assigned resources not used by states within a specific period of time will be reallocated by MoH through a new competitive call.
- 3.9 All eligible participants will propose subprojects through a two-staged process rationalizing the approval process and preparation efforts: For all types of subprojects a letter of consultation (with data justifying the investments requested) would be presented to the State Bipartite Management Committees (BMC) via the corresponding Municipal Secretariats and the State Secretariat of Health (SSH). For equipment and technical assistance subprojects, once approved, no further presentations would be required. For civil works subprojects receiving preliminary approval, the presentation of feasibility studies and designs would follow as a requirement for final approval by the respective entity according to the value of each subproject, as outlined below. Appraisal and approval of all subprojects, regardless of category and priority,

including unfinished works on hospitals, will be carried out as summarized in Table III-1 on the basis of transparent criteria acceptable to the Banks as established in the Operational Manual, and to be reviewed annually. The involvement of the BMC in the approval process, in the light of investment ceilings established by State, will ensure a realistic allocation of investment resources between competing proponents on the basis of consensus.

TABLE III-1 Summary of Subproject Review and Approval Process				
Amount	Approving Agency	Reviewing Entities	Funds Released by	Financial Agents
>US\$3,000,000	MoH	BMC/PMU/Banks	MoH	BNDES
US\$1,000,000 to US\$3,000,000	MoH	BMC/SSH/PMU	MoH	BB
US\$350,000 to US\$1,000,000	BMC	SSH/RPMU	MoH	BB
US\$50,000 to US\$350,000	BMC	SSH	MoH	BB

- 3.10 Rehabilitation subprojects estimated to cost up to US\$1,000,000 will be pre-approved by the SSH and the RPMU, and approved at state level by the existing BMC, which include representatives from both the state and Municipal Health Secretariats. Higher cost subprojects will be sent to the PMU for further economic and financial analysis and its approval will be revised by the Minister of Health. Subprojects estimated to cost more than US\$3,000,000 will be analyzed and approved by the BNDES, the PMU, the Tripartite Management Committees, the Minister of Health and the Banks.
- 3.11 Only states and municipalities with at least some degree of autonomy will be eligible to propose subprojects under the component I of the Program (those not yet granted any level of autonomy would only be eligible for technical assistance supporting their transition to a minimal level of autonomy (see par. 2.10 (3)). Eligible investments in autonomous states & municipalities will correspond to their level of autonomy (e.g., states with minimal autonomy would only receive resources for investments in basic health services (plataforma ambulatorial básica - PAB); states with advanced autonomy (i.e., receiving block-grants in lieu of SUS reimbursement for all levels of service) would have authority to approve subprojects up to US\$3 million.
- 3.12 RPMUs will appraise subprojects on the basis of transparent eligibility and appraisal criteria detailed in the Operational Manual and approved by the Bank. Eligibility criteria will include: (i) minimum autonomy level of sponsor (e.g., municipality, state); (ii) coherence with health sector development plans in states and municipalities; (iii) infrastructure subprojects must be accompanied by a proposal of management improvement; (iv) proposals must have a program of health care quality improvement; (v) a program to reduce environmental impact and evaluation; (vi) higher technology acquisition, after MoH approval, must follow MoH utilization norms; (vii) evaluation of expected impact on recurrent costs; (viii) estimation of expected benefits; (ix) monitoring and

evaluation; and then, criteria specific to the type of investment (e.g., works, equipment, management development, etc.). Initially, priority will be given to those subprojects under maternal and child health, and emergency care areas.

- 3.13 Initially, the only eligible facilities will be those presenting proposals that include the priority areas listed in Chapter II, and, in the case of basic health services, have functioning or are proposing to introduce the Family Health Program. Required actions for improvement of quality assurance systems (in all subprojects, as previously stated) will emphasize maternal care and control of hospital infections. It has been agreed that unfinished civil works identified as priorities will be evaluated on the same basis as other investment projects, and will need to be resubmitted to the corresponding BMCs to verify their priority in the light of the ceilings of REFORSUS investment resources to be allocated to each state. Eligibility of these will be limited up to the level of general regional hospitals. Criteria for the acquisition of certain high-cost technologies ^{9/} have also been explicitly addressed as exceptions to be considered on the basis of well-justified need and to be used in accordance with present and future MoH norms, and at a total cost not exceeding 10% of REFORSUS Component I resources.
- 3.14 Subprojects will be financed with grants to the proposing entities, linked to management contracts between the PMU and the recipient State or Municipality, and between the latter and the beneficiary. These contracts would establish specific goals and benchmarks (coverage, quality, others) to be achieved during each budget cycle, using the block grants received. Local beneficiaries, would contribute with an average of 15% of total subproject costs.
- 3.15 Banco do Brasil (BB) and BNDES will handle contract arrangements and, along with RPMUS, supervise subproject implementation. After each subproject is approved and funds are released by PMU, the banks will sign an implementation contract with the subproject sponsor and ensure adequate financial management. Following the contract, the BB/BNDES will advance funds to cover subproject start-up and to finance subproject preparation costs retroactively (up to 10% of total subproject costs). Subsequent payments would be made on the basis of (i) statement of expenditures, (ii) satisfactory implementation of core management systems and two optional management systems, and (iii) project supervision reports reflecting adequate progress in implementation. The PMU and the RPMUS will provide or contract technical assistance to help the beneficiaries organize national competitive bidding and will carry out international competitive bidding.

^{9/} MRI, CAT, Angiography, Mammography, X-Ray equipment over US\$100,000, cobalt units, linear accelerators, lithotripsy, hemodialysis, ambulances.

C. Procurement arrangements

- 3.16 Procurement of works, goods and services, as well as the contracting of consultants with Banks' funds, will be carried out in accordance with IDB and IBRD guidelines for procurement.
- 3.17 Most procurement will be carried out by States or Municipalities, community organizations, and non-profit providers, following procedures agreed on by both Banks. For contracts over US\$5 million for civil works and US\$350 thousand for goods to be awarded following International Competitive Bidding (ICB), and finance with IDB funds, standard Bank procedures will be followed (Annex B of loan contract). For contracts below the ICB thresholds, national legislation will apply. Specific thresholds have been set for National Competitive Bidding (NCB) and standard bidding documents approved by IDB and IBRD will be used for this purpose.
- 3.18 In allocating loan funds to procurement of goods and services, it has been agreed that special care will be taken by the PMU to maintain "pari-passu" between the disbursements of both Banks, while respecting the stipulations regarding source & origin of goods and services, given differences in the country eligibility of the IDB and the IBRD.
- 3.19 The PMU will include a full-time procurement officer whose main responsibilities will be to: (i) submit to the Banks all procurement documents which, according to the provision of the loan agreement require prior Bank review; (ii) carry out procurement at the central (PMU) level; (iii) monitor procurement carried out by each executing unit (e.g., State, Municipality, Facility) (iv) prepare and submit to both Banks at the beginning of each calendar year a detailed procurement schedule. The appointment of the Procurement Officer should be done in consultation with the Banks.
- 3.20 At the central level, the PMU will procure: (i) required office refurbishing and equipment for the PMU and the planned health policy unit; and (ii) will carry out all ICBs during the first year of implementation for large medical equipment or supply contracts. Gradually, the executing entities may undertake ICBs, once the Banks and the PMU are satisfied that they have developed the capacity to do so in accordance with IDB & IBRD guidelines.
- 3.21 The project will finance individual consultants and consulting firms to provide technical assistance, training, studies, promotion & dissemination activities, monitoring and supervision, and auditing and evaluation services. Consulting services will be selected and contracted in accordance with IDB & IBRD guidelines for the hiring of consultants (Annex C of IDB loan contract). A standard invitation package, including letter of invitation, standard format for terms of reference, and contract forms will be agreed on by the PMU and the Banks, and passed on to the executing agencies.

- 3.22 The Banks will review: (i) bidding and contracting procedures for works of US\$5 million or more; (ii) bidding and contracting procedures for goods of US\$350,000 or more; (iii) all terms of references, short lists and contracts for consulting firms of US\$100,00 or more; (iv) all terms of reference, short lists, and contracts for individual consultants of US\$50,000 or more; (v) contracts for the PMU general manager and Regional PMU managers and the Project's Procurement Officer; (vi) the first subproject in each category; and (vii) annual procurement schedules.
- 3.23 Based on the subprojects to be financed in the first year of project implementation, it is estimated that the Bank will review about 27 contracts per year and about 9% of all Bank-financed subprojects. In addition, the MoH will retain the services of a financial and procurement auditor satisfactory to the Banks, to prepare ex-post financial and procurement audits, at least every six months on the basis of appropriate samples of procurement documentation. Audit reports will be sent to the Banks not later than six months after their completion date.
- 3.24 At or before project launch, a procurement workshop will be delivered by staff of both Banks to present and explain relevant IDB & IBRD procurement guidelines and to commence preparation of specific bidding documents, and to ensure that the initial arrangements for contracting goods, civil works and services are properly carried out.
- 3.25 A standard procurement plan is not attached to this document since the project will be demand driven and therefore, all procurement processes have not yet been determined. As a condition of first disbursement the Banks will receive a procurement plan for the first year of project implementation. During the Annual Review Meetings, the Bank will review the procurement schedule for the following year, specifying the packaging of contracts into international or national tenders, as well as the number and estimated cost of the subprojects to be financed under the loan.

D. Disbursements and documentation of expenditures

- 3.26 The proceeds of the Loan (US\$350 million equivalent) will be disbursed to the Federative Republic of Brazil. The Government will transfer the same to the Banco do Brasil which will, in turn, use the Loan resources in conjunction with funds from other international credit agencies to finance subprojects. As a condition for first disbursement, the Borrower will sign a Subsidiary Loan Agreement for making the funds available to the Banco do Brasil, on terms acceptable to the Bank. The proceeds of the Loan will be made available to the beneficiaries as grants, contingent on the signing of management contracts with specified coverage & other goals, between the PMU and the relevant State or Municipal authorities, and between these and the sponsoring entity for each subproject. The Borrower will bear the foreign exchange risks. The beneficiaries will contract works, goods and

consulting services and supervise project execution with the assistance of approved consultant firms or individual consultants.

TABLE III-2 IDB - IBRD Disbursement Schedule (US\$ millions)					
Source of Funds	Year 1	Year 2	Year 3	Year 4	Total
IDB	115	100	80	55	350
IBRD	100	85	65	50	300
Beneficiaries	25	25	25	25	100
Total	240	210	170	130	750
Cumulative	240	450	620	750	

- 3.27 The proposed Loan will be disbursed over a period of four years (Table III-2). The project's commitment of funds period will be six months prior to the date of final disbursement.
- 3.28 The PMU will present full support documentation for all requests for disbursement with a contract value of US\$3 million equivalent or more for works, US\$350,000 equivalent or more for goods, US\$100,000 equivalent or more for services with consultant firms, and US\$50,000 equivalent for individual consultant contracts. The PMU will document the disbursement of smaller contract values with statements of expenditures (SOEs), and will maintain the corresponding supporting documents for review by the Bank upon request. Up to 10% of the total loan resources could be disbursed in advance upon Borrower's request. Advance of funds will be justified following standard Banks' guidelines and procedures.

E. Audits

- 3.29 The Secretaria Federal de Controle (SFC) or any independent external auditors that it approves, which must be acceptable to the Bank, will audit the PMU annually. No later than six months after the end of each fiscal year, the PMU will submit to the Banks copies of the audit reports containing the auditor's opinion on: (i) project accounts, including statements of expenditures (SOEs); (ii) whether procurement was carried out in accordance with agreed guidelines; and (iii) the adequacy of internal controls to minimize the possibility of misuse of funds.
- 3.30 In addition, the auditors will undertake special semi-annual audits of a significant sample of subprojects financed under the Loans, on the basis of acceptable accounting norms and procedures, to ascertain whether the terms of individual contracts were complied with, to inspect progress of works, to reconcile physical progress with financial expenses incurred, and to determine if procurement guidelines are being respected. The auditors will prepare semi-annual reports for the PMU and for the Banks to be submitted

no later than two months after each quarter, as well as an annual summary.

F. Monitoring and supervision

- 3.31 The project will be monitored through a number of key performance indicators including outcome, output, process and input indicators, as detailed in Annex III-2. Starting on the first day of project year 1 the PMU will submit to the Banks semi-annual reports comparing achievements with the set of agreed indicators. These reports will include information on: (i) subprojects presented, appraised, under implementation, completed and evaluated; (ii) lists and summary reports of studies, technical assistance summaries; lists and outlines of courses, and number of staff trained; and management systems installed; (iii) progress on implementation of health sector reforms; (iv) annual public health expenditure review and budget proposals; (v) full documentation on any subproject of more than US\$3 million equivalent, regardless of the source of financing; (vi) project costs and financing; (vii) changes in PMU management, structure and operative manual; (viii) compliance with key legal covenants; (ix) supervision of subproject execution; (x) summary of financial and procurement audit reports; and (xi) summary of ex-post evaluation reports on a sample of completed subprojects, including increased coverage and efficiency gains.
- 3.32 The PMU and key MoH staff and the project teams of both Banks will meet once a year, prior to final approval of the subsequent year's budget, to review among others the following aspects: (i) progress achieved in policy reforms, in adjustment of SUS tariffs, in autonomy of states & municipalities, and in project implementation; and (ii) assessment of the experience with eligibility & evaluation criteria, and the definition of revised criteria and implementation arrangements for the subsequent year (Annex III-3). If, as a result of such review, the Banks consider that the progress made by the Borrower in implementing the Project or the reforms set forth in the Policy Letter is not satisfactory, the Banks may refrain from approving the proposed Annual Investment Program for the next year of project implementation.

G. Evaluation

- 3.33 The PMU will retain the services of an independent research organization, such as a university or a research oriented NGO, to carry out an ex-post evaluation of a sample of completed projects, which would consist of a combination of traditional economic evaluation and beneficiary assessment.

H. First Year Project Implementation Plan

- 3.34 Since the project will operate as an investment fund, implementation plans for the first year focus on a series of requests for financing proposed by states municipalities and

philanthropic providers on a competitive basis. Specific subproject plans for the first year will only be available after Bipartite and Tripartite Management Committee approval, and will be reviewed and approved by both banks prior to initial disbursement. The major studies & innovations planned under the Institutional Development Component (II), based on terms of reference agreed on at appraisal, will focus on Private Health Insurance, Burden of Disease, Management Contracts, Cost & Cost-Effectiveness of Services, Health Information System, and Quality Assurance for Maternal Care & Hospital Infections, among others.

I. Environmental analysis

- 3.35 REFORSUS has been given identical environmental ratings by both Banks. The project has been classified as a Category III by the Bank and a Category B by the IBRD, which reflects the following conclusions about REFORSUS and its subprojects: (i) no irreversible impacts on the environment are expected; (ii) negative impacts on the environment can be eliminated or mitigated by implementing relatively straight-forward measures; (iii) the Project could have positive impacts on the environment if measures are taken to foster them; and (iv) concrete environmental protection measures, institutional assistance and corresponding budget must be provided by the project to contractually assure the implementation of the previous three items.
- 3.36 An Environmental Analysis report was prepared by the MoH, with guidance from the Banks, to assess potential environmental impacts of the Project and outline the corresponding environmental protective measures. The main environmental issues encountered relevant to REFORSUS, were inadequacies in the control of infections and a widespread lack of management and safe disposal of hospital waste. Brazilian environmental legislation requires that each facility present a Solid Waste Management Plan and assign a person the responsibility for its implementation.
- 3.37 The Project is expected to have a large-scale positive impact on Brazilian's health status, both directly through increased availability of better health services, and indirectly, by fostering actions of environmental and sanitary responsibility. As municipalities improve their waste management and disposal, one can expect a lower degree of environmental contamination, and the project contributes to improve the control of infectious diseases by removing syringes and needles and other dangerous items from circulation. Institutional strengthening and technical assistance for subproject preparation, training and better equipment, should increase compliance with environmental laws.
- 3.38 The aspects of internal and occupational safety are well covered in the Ministry of Health's manuals (e.g. electrical safety, special equipments, emergency procedures for lack of water and energy, occurrence of fires, materials, installation and safe operation of equipment, provision of potable water and sanitation; radioactive

and non-hazardous waste disposal). Special care is taken in outlining procedures to minimize in-hospital infections from cleaning, disinfection and sterilization and to vector control. These practices are incorporated in architectural designs, and will be applied to all REFORSUS infrastructure investments.

- 3.39 REFORSUS is implementing the following activities for safe environmental management: (i) subproject eligibility criteria; (ii) health facility waste-management plan; (iii) technology-specific environmental measures; and (iv) institutional strengthening and technical assistance. The principal environmental eligibility criteria for subprojects are: (i) submission of an Environmental Brief to be presented with subproject's proposal; (ii) submission of the waste management plan for the proposed facility; and (iii) implementation of the environmental protection measures for the specific technologies to be used by the facility.
- 3.40 An acceptable waste management plan will specify procedures for: handling, segregation, packaging, transporting, treatment, final disposal, contingency plan, training, reporting, responsibility, and funding. Some environmentally-acceptable technologies and their respective environmental protection norms are discussed in the EA report. These include steam sterilization, on-site and off-site incineration, sanitary landfill, and, as a last resort, burial at the landfill with special protective measures taken.
- 3.41 The Project also provides technical assistance in environmental issues for: (i) participating state agencies that can show they are institutionally weak to assist in subproject analysis, monitoring and fiscalization; and (ii) proponents who will need to train their staff or hire consultants for subproject preparation and implementation at initial stages.

IV. ECONOMIC AND FINANCIAL ANALYSIS

A. Analysis of project alternatives

- 4.1 The project would primarily subsidize investments in infrastructure and management of publicly-owned or publicly financed non-profit private health care facilities. This raises questions at three levels: first, what would happen if there were no project, or if the Banks did not participate in it? Second, should it be a single project, or would it be advisable to delay an investment operation until reforms were better defined and implemented? Third, what is the best project design? In particular, (i) should the investment be limited to publicly-owned facilities? (ii) should private non-profit providers be fully subsidized or have to repay part of the investment under the project? and (iii) should private for-profit providers also have access to the investment funds?
- 4.2 The diagnosis of the current situation of SUS is that it cannot continue to function with payments to providers that are on average well below costs. Even in the absence of an investment and reform project, there would still be a need to raise tariffs. But if that were all that happened, there would be little or none of the investment needed to restore or improve capacity, so the deterioration of public services would continue, although at a slower pace. And it would be harder for the Government to conduct a systematic reform of prices, quality and management without the investment incentive and the technical assistance of the Banks.
- 4.3 At the moment, some proposed reforms are at the conceptual stage and have not been tested; this is the case for the use of differentiated tariffs to induce changes in output toward greater cost-effectiveness, and for recovery of costs from privately-insured patients. However, the Government has already made substantial progress in negotiating expenditure ceilings, abolishing quantitative controls on ambulatory care procedures and allowing states and municipalities to shift resources between hospital and ambulatory care, improving the detection of fraud, and raising tariffs overall. To hold off longer on needed investments, would actually jeopardize the reform gains so far.
- 4.4 Limiting the investment to publicly-owned facilities would ignore the fact that a great proportion of SUS services are delivered through non-profit private hospitals and clinics that depend overwhelmingly on public financing. The distribution of public and private non-profit SUS facilities varies from place to place and from service to service. Therefore, it has been agreed with the Government that, on both grounds of equity and efficiency, both types of facilities should be eligible for project resources.

- 4.5 To compensate for the fact that qualifying providers will be getting free investment funds from the project, they will have to agree to management contracts in return: these will spell out the associated management reforms and also the increased or improved production of services which the investment is to make possible. For example, a facility that expanded or upgraded its maternity might contract to increase pre-natal coverage, or reduce maternal mortality or the use of Caesarean sections.
- 4.6 Private for-profit providers will not receive resources from the proceeds of the loan. They will, however, have access to loans provided by the Banco Nacional de Desenvolvimento Econômico e Social (BNDES) under the same selection criteria as those applied in the project.

B. Fiscal impact and project sustainability

- 4.7 Project sustainability depends on the capacity of the Government to cover the operating costs of the SUS. Such costs can be expected to increase as a result of: (i) increased tariffs paid by the SUS (this will be largest fiscal impact); (ii) increased recurrent expenditures to make use of the capital created or restored by the project; (iii) higher volume of some services due to the investments or stimulated by the tariff increases; and (iv) population growth. There are two potential sources of reduced costs: reduction in fraud (which would allow buying the same real services at lower expenditure or more services for the same money), and recovery of costs from privately insured patients (provided new legislation allows this). The project will also reallocate resources from low priority areas to higher priority areas, but the fiscal impact of this is included in that of the tariff changes.

1. Tariff changes

- 4.8 Estimates of SUS spending for 1996 already include an average increase of 34% in tariffs. This will rise to 50% in 1997, after which tariffs are assumed constant in real terms: we estimate that tariffs need to rise between 50 and 70% to cover the costs of most services. If nothing else happened except this adjustment to average tariffs, and an increase of 2% per year to accommodate population growth, SUS expenditure would rise to almost \$12.7 billion by the year 2001.
- 4.9 There is another effect of tariff change: it is expected that introducing differential tariffs would emphasize the production and delivery of more cost-effective interventions, having a health impact. However, how changes in tariffs will affect output (reflected by price elasticities of supply) of services and expenditure on them is still unclear. This because SUS operates under three kinds of federal controls at once: i) on the tariffs paid to producers for services; ii) on the number of patients whose hospitalizations (9 per 100 population per year) will be financed; and, iii) on total expenditure by the federal government, state by

state. Given these types of controls over output and recent adjustments made by the MoH, our estimation of price elasticities of supply has been nonconclusive. Therefore, the precise effect and its magnitude over output and expenditures could not be estimated with the information available.

2. Recurrent costs from capital investments

- 4.10 The second element of additional recurrent cost comes from the capital investments supported by the project. Table IV-1 shows how the \$750 million in project funds might be divided through time and among the five major categories of expenditure: 70% on physical investment, 12% on management improvements, 10% on the family health program and the remaining 8% on Component II.

TABLE IV-1 Distribution of Investments by Type and Year US\$ million						
Type of Investment	1996	1997	1998	1999	2000	TOTAL
Infrastructure and Equipment	70.0	192.5	122.5	96.6	43.4	525.0
Management and Maintenance	12.0	33.0	21.0	16.6	7.4	90.0
Family Health Promotion	10.0	27.5	17.5	13.8	6.2	75.0
Health Care Financing	8.0	22.0	14.0	11.0	5.0	60.0
TOTAL	100.0	275.0	175.0	138.0	62.0	750.0

- 4.11 Considering the different types of subprojects to be financed, an estimated proportion of ambulatory and hospital infrastructure investments, and the level of completion of investments to be rehabilitated, coefficients between capital expenditure and additional recurrent expenditure were estimated. Combining expected recurrent costs from investments in ambulatory facilities, in hospitals and family health programs, yields a total impact of \$450-561 million in annual recurrent financing. This is small compared to the additional expenditure implied by a 50% increase in tariffs, even if output of services were not to respond to the price rise. And the true impact may be smaller, when effects on quality improvement, spatial redistribution, and shift in composition are taken into account.
- 4.12 The distribution of the recurrent cost impacts from investment through the life of the project, is distributed in proportion to the investments shown in Table IV-1 with a one-year lag. Changes in the temporal distribution of the investments would not affect the long-run constant level of \$561 million, but only the speed with which recurrent expenditure converged on that amount.
- ## 3. Cost recovery from privately insured patients
- 4.13 Table IV-2 shows that if cost recovery is legalized and introduced, it would begin to generate revenue in 1997 and reach a level of \$298 and \$380 million annually by 2000 and 2001 respectively, offsetting much of the recurrent cost increase from investments. .

An upper bound estimate of \$1.8 billion is given by expanding results from a study which estimates the magnitude of the loss from subsidizing private insurers in the Federal District (Brasilia). However, this would be an over-estimate since in much of the country there are relatively few privately-insured patients.

TABLE IV-2 Projected revenue from cost recovery under SUS					
	1996	1997	1998	1999	2000
(a) Total population in Brazil (millions)	162.0	165.3	168.7	172.1	175.6
(b) Percentage with private insurance	20%	20%	20%	20%	20%
(c) Insured population (millions)	32.4	33.1	33.7	34.4	35.1
(d) Percentage of the insured using SUS	30%	30%	30%	30%	30%
(e) Per capita SUS spending	65.3	70.8	70.8	70.8	70.8
(f) Projected SUS costs (\$ millions)	10,580	11,708	11,940	12,179	12,423
(g) Potential cost recovery from the privately insured (% of projected SUS costs)	6.0%	6.0%	6.0%	6.0%	6.0%
(h) Cost recovery rate with respect to potential	0%	10%	20%	30%	40%
(i) Cost recovery from the privately insured (% of projected SUS costs)	0.0%	0.6%	1.2%	1.8%	2.40%
(j) Actual cost recovery (\$millions)	0.0	70.2	143.3	219.2	298.2

Notes:

- (a) Population growth rate is 2.033% per year.
- (b),(c) Based on existing coverage of about one fifth of the country's population.
- (d) One-third of the insured regularly use SUS; two-thirds use non-SUS private providers.
- (g) Computed as (b) times (d).
- (h) In 1996 zero cost recovery is assumed. Beginning in 1997, actual cost recovery is 10% of potential, and increases by 10 percentage points annually thereafter.
- (j) Computed as (f) times (i).

4. Fraud control

- 4.14 Fraud control can also have a major impact on SUS expenditure. The MoH is currently analyzing several types of fraud: (i) reporting a higher number of events than those actually delivered; (ii) reporting more costly events than actually delivered; (iii) artificially adding the delivery of special pharmaceuticals or diagnostic procedures to hospitalizations in order to secure a higher reimbursement; (iv) reporting a higher hospital length of stay than actually delivered; (v) reporting fictitious events; and (vi) for ambulatory care, charging the allowable ceiling for laboratory tests and diagnostic exams rather than the actual volume. Table IV-3 presents examples of fraud associated with hospitalization for 1995.
- 4.15 In 1995, fraud control efforts at the federal and state levels detected irregularities in the amount of \$774 million. Control of fraud is estimated to save \$1 billion already in 1996, with savings of \$1.27 billion by the end of the project. The amount that could be recovered would of course decline if fraud becomes less

prevalent--which would represent an even greater saving--and would increase if greater spending on control resulted in a higher rate of detection.

TABLE IV-3 Examples of Fraud in Reimbursement of SUS Hospital Care, 1995		
Cause of payment rejection	Number of hospital discharges (AIHs)	Magnitude of fraud (1995 \$ thousands)
Double billing for the same patient within a given month	271,479	71,942
Charges already included in other invoices	132,541	35,123
Length of stay in hospital inconsistent with procedure*	268,863	71,249
Inappropriately billing both a municipality and the MoH	78,866	20,899
Hospitalization not officially authorized (serial authorization number forged)	36,829	9,760
Hospital with invalid zip code	13,890	3,681
Hospital does not belong to SUS	29,431	7,799
Total inpatient days billed by hospital exceed hospital's capacity	34,488	9,139

Source: Ministry of Health of Brazil.

*: Only 5 months were reviewed.

5. Financial sustainability

- 4.16 The four sources of changed expenditure related to the project are combined in Table IV-4. The first line shows the impact of the tariff increase plus population growth. The combination of these impacts with the additional recurrent costs generated by investments (line 2), and the savings from cost recovery (line 3), leads to estimated SUS spending of \$12.85 billion by the year 2001 (line 4). If the savings from fraud control were used to reduce spending rather than to buy more services, SUS expenditure would come down to an estimated \$11.6 billion at the end of the project, or about \$2.3 billion more than in 1996 and close to \$4 billion over the 1995 level, before any tariff increase.
- 4.17 Assuming that all costs other than those of reimbursing providers are frozen, following the substantial increases budgeted for 1996, the MoH budget would have to grow from US\$15.7 billion (US\$99 per capita per year, 2.6% of GDP) in 1995, to US\$24.0 billion in 2001 (US\$135 per capita per year, 3.0% of GDP) when the full fiscal impact of the project would be felt.
- 4.18 The GoB is pursuing several options to raise revenues to bridge the financial gap between percent levels of health expenditure and

those implied by the project ^{10/}: (i) in the short-term, significant financing would come from a new two-year tax on financial transactions--CPMF (Contribuição Provisória sobre Movimentação Financeira), approved by Congress in July 1996, while more stable sources of revenue are secured; (ii) earmarking of 30% of the Social Security Budget to the health sector as defined in the Constitution; and (iii) persuading states and municipalities to increase the share of their budgets allocated to health from the present 3-5% to 10%. Under both scenarios in Table IV-4, revenues would match the expenditures generated by the project. Should none of the above materialize, there is still room for shifting resources from the non-SUS activities of the Ministry to finance medical care. Also, the investment program size and the increase in reimbursement rates would be agreed annually with the Government, on the basis of the estimated revenues.

TABLE IV-4						
Estimated Project-Related Expenditure, 1996-2001 (US\$million)						
Expenditure or Cost Reduction	1996	1997	1998	1999	2000	2001
SUS spending (with tariff increase)	10,580	11,706	11,940	12,179	12,423	12,671
Plus Recurrent Costs	0	75	281	411	515	561
Less Cost Recovery	0	70	143	219	298	380
Net Total SUS Spending	10,580	11,711	12,078	12,371	12,640	12,852
Less Fraud Control	1,058	1,171	1,194	1,218	1,243	1,267
Potential Net SUS Spending	9,522	10,540	10,884	11,153	11,397	11,585
Plus Non-SUS	12,420	12,420	12,420	12,420	12,420	12,420
Total Ministry Spending	21,942	22,960	23,304	23,573	23,817	24,005
Projected Revenue						
Scenario 1	21,546	26,415	27,669	24,933	26,113	
Scenario 2	23,506	28,473	29,829	22,745	24,815	

NOTES: Scenario 1 estimates revenues under the assumption that CPMF is approved and is later replaced by contributions from both Social Security Budget (SSB) and from state and municipal budgets. Scenario 2 assumes that only contributions from SSB replace the CPMF contribution, and that the SSB would grow with the economy at a 5% rate.

- 4.19 The viability not only of the project but of the entire SUS system depends on a long-term revenue commitment, together with continued control of state level budgets, tariffs and hospitalizations by the Ministry, and a concentration of output on more cost-effective services, promoted by the differential tariffs. Under these conditions, the gains for health in Brazil can be substantial even if some services continue to be under-financed and expenditure ceilings remain very tight. However, the costs associated with the

^{10/} Although none of these proposals for earmarked funds is satisfactory, nor can they be counted on to provide a stable flow of funds to the health sector, the project is accordingly introducing the concept of cost-recovery from services provided to privately insured patients, which could raise revenues up to US\$1.3 billion per year. This will take time to build into a quantitatively important financing item, but represents a significant qualitative change in responsibility. In addition, through transparent formulae for allocation of federal funds, the project creates incentives from states and municipalities to increase the share of their own resources devoted to health.

project can be financed if, and only if, revenues for health grow at the same reasonably rapid pace as the economy and total social security revenues, and if government commitment for introducing new options for increased savings or increased revenues such as fraud control, cost recovery and larger contributions from local governments continue as strong as they have been during this administration period.

V. BENEFITS AND RISKS

A. Lessons learned

- 5.1 The REFORSUS project would complement five other World Bank projects in Brazil. Presently, Brazil has one of the largest portfolios in both Banks. Although the IDB has not been recently involved in the health sector in Brazil, there are important lessons learned from other projects and from those financed by the World Bank. There have been several problems faced when implementing projects in Brazil: (i) Government instability; (ii) inadequate project design; (iii) poor management arrangements; and (iv) excessive number of covenants.
- 5.2 **Government authorities turnover.** The various changes in Ministry positions has often resulted in decreasing commitment by the Brazilian authorities to project objectives. During the last 15 years, projects have had their implementation timeframe altered and new government administrators have decided not to continue the previous administration's projects. Yet these problems seem to have been partially reduced lately with the successful implementation of an economic reform that has diminished both the political and financial instability in the country. After experiencing inflation rates up to 2000% a year, for the first time Brazil is being able to keep it in acceptable levels and grow economically. Other factors positively influencing this project are: (i) the large amount of human and physical resources that has been invested in the project during its preparation; (ii) the number of stakeholders extensively involved in project identification, preparation and appraisal; in case of governmental change, one could expect sufficient consensus on the objectives and design of the project to maintain it among the priorities of other governments; and (iii) finally, the municipalities, states and non-profit health care providers, who would prepare and present subprojects and ultimately be the major beneficiaries of the project and make up a strong constituency for the overall project.
- 5.3 **Inadequate project design.** Some projects in Brazil have faced delays in implementation and additional costs when during execution the implementation layout and institutional analysis had to be reviewed. The REFORSUS project, besides being preceded by broad institutional discussions and support, has been designed as a demand-driven fund-like project, whereby funds are allocated to different geographical areas on the basis agreed criteria, and subprojects are presented by the beneficiaries, ensuring them ownership. This demand-driven approach will facilitate the implementation of the project.
- 5.4 **Poor project implementation arrangements.** The structure of the Brazilian public sector, the number of covenants and transactions involved in each project, and the lack of adequate assistance on

the part of federal government to ongoing projects, all of them have constituted a source of frustrations for the financial multilateral institutions. Although the MoH is burdened by cumbersome administrative procedures, it has been able to successfully manage five World Bank-financed projects, and the latest operation -- AIDS and STD control (Ln.3659-BR), has been well-managed. The project would use BNDES and the Banco do Brasil as financial agents, which would contract directly with the beneficiary or with the providers of works, goods or technical assistance. Such an arrangement would avoid the ministry's bureaucracy and reduce the number of financial transactions between the Bank and the contractor or beneficiary. The MoH would keep the technical appraisal and supervision functions, areas in which is strong, while it would subcontract BNDES and Banco do Brasil for all administrative and financial transactions. The PMU regional technical assistance offices would help weaker states and municipalities in subproject preparation, evaluation and supervision. In addition, the MoH would retain the services of an independent consulting firm for purpose of carrying out evaluations of subprojects.

- 5.5 **Excessive number of covenants.** Conditionality was reduced to the greatest extent possible and set, as much as possible to be fulfilled at negotiations. The remaining considered as critical to the sustainability of the project would be monitored in November 1997 and 1998.
- 5.6 **Performance Indicators.** The project would include a number of performance indicators, covering inputs, process, output and outcomes (Annex III-2). Project supervision would focus on the agreed indicators. The indicators would regularly monitored, deviations analyzed, and corrective actions taken.

B. Program benefits

- 5.7 The project will benefit mostly the poor who must rely on SUS as their only source of care. The project will allocate resources for improving SUS infrastructure emphasizing those health units located in low income areas, and the revision of the reimbursement rates will correct price distortions of a list of most cost-effective interventions which are presently not properly delivered, which disproportionately affect the poor. Given that this is a demand-driven project it is difficult to estimate ex ante the overall economic benefits which will depend on the volume and composition of individual subprojects. However, basic assumptions using comparable regional experiences ^{11/} show that improved access and the quality of basic clinical and public health services when provided in a poor area, could avoid about 10% of the burden of disease, measured in reduced number of disease adjusted life- years lost. Family medicine pioneer experiments in Brazil have been successful: in Paraná, between 1986 and 1994, the program reduced

^{11/} Economia y Salud, vol. 11 (Mexico, FUNSALUD, 1994).

infant malnutrition from 18 to 4%, increased vaccination rates from 47 to 75%, broadened coverage of prenatal care by 33%, and reduced hospital admissions by 20%. Relative priority will be given to maternal and infant care services, to emergency and trauma centers. Studies in Mexico suggest that delivery and prenatal care could reduce 47 adjusted life years lost due to maternal causes per 100 beneficiaries, per year. Expert opinion suggests that adequate emergency and trauma services could reduce, in the respective catchment areas, the number of life-years lost due to accidents and other external causes by 20%, and save 6 disability adjusted life years per beneficiary per year.

1. Equity

- 5.8 The project would also improve equity by: (i) introducing a mechanism to allocate investment budgets according to a transparent and easy to justify formula which allocates resources according to population, and an indicator of health investment need by State. The formula allocates in each state 70% of resources according to population and the other 30% according to an estimate of its "per-capita health expenditure gap" with the state that has the highest health expenditure per-capita. This will help to reduce the discrepancies that exist between the rich states of the South and Southeast and the other regions of the country; (ii) prioritizing investments in low income areas; (iii) limiting reimbursement of expensive and relatively less cost-effective tertiary care, which is mostly used by privately insured patients and by middle and high income groups.

2. Efficiency

- 5.9 The project will improve the allocative efficiency of the SUS by increasing the proportion of public health funds spent on more cost-effective interventions, both through revised tariffs and investment subprojects. The project will establish a new framework for pricing and reimbursing health care providers which will favor more cost-effective interventions at the expense of less cost-effective ones. Priority will be given to subprojects in the areas of maternal, child, family health and emergency and trauma care, with special emphasis on the delivery of more cost-effective interventions.
- 5.10 The project would also improve the internal efficiency of the SUS by: (i) restoring the system's capacity; (ii) putting idle complementary resources back into use; (iii) reducing the cost of interventions already being provided; (iv) improving the reimbursement system; (v) requiring improved management systems as a condition for receiving funding for rehabilitation and equipment; (vi) reducing fraud, and (v) introducing cost recovery from privately insured patients. By restoring the system's capacity the project would increase the number of patients treated, and allow a more efficient utilization of diagnostic equipment, beds, and health care facilities. Health care management improvement would

improve hospital efficiency through higher occupancy rates, shorter lengths of stay, higher bed turnover, and higher number of patients treated. In addition, it is expected that the automation of management systems would reduce administrative costs. Finally, project incentives for more cost-effective procedures (i.e. day care, outpatient surgery) would lead to an increase coverage (i.e. number of patients treated) and to a reduction of hospital costs.

3. Autonomy

- 5.11 Finally, the project would strengthen the capacity of states and municipalities to act as health care administrators and purchasers, and thus we would expect that services will better reflect the needs of beneficiaries and that accountability and social control will improve. In addition, the decentralized financing of health care would also bring efficiency gains, since at the local level resources can be allocated according to local health priorities. Fraud control at the local level is also emphasized by the project.

C. Program risks

- 5.12 The main risks of the project are: (i) non-compliance with reform agenda, thus jeopardizing the sustainability of the investments; (ii) incomplete or poor implementation of the project; and (iii) lack of revenues to finance the incremental recurrent costs which will be generated by the project and adjustments in the reimbursement schedules which will be necessary to cover costs and to maintain capital.
- 5.13 Non-compliance with the reform agenda could be caused by the return of high inflation, rapid turnover at the ministry level and by lack of political will. The return of inflation would make the proposed price adjustments extremely difficult. The effect of inflation could only be mitigated through indexation of prices to inflation, but this would only contribute to the inflationary spiral. The change of government would bring a delay in project implementation but is unlikely to bring the project to a halt, given the significant stakeholder support ensured during project identification and preparation. The Federal Government took the lead in project identification, preparation and appraisal, while States and municipalities have been consulted through their representatives in the National Health Council (CNS), the National Council of State Health Secretariats (CONASS), and the National Council of Municipal Health Secretariats (CONASEMS). In addition, the wider society has been consulted through their representatives in the Senate and Congress social committees. The risk of project breakdown would be minimized by continuing to involve the stakeholders in the identification, preparation and execution of subprojects, and by selecting investments on the basis of clear and transparent criteria which could be supported by any government. In any case, the Bank would decline to commit against new subprojects if annual expenditure reviews and policy analysis show

non-compliance with the policy reform matrix agreed with the Government (Annex II-1).

- 5.14 Risks associated with poor or incomplete project implementation can be caused by funding poorly justified subprojects, poor administrative capacity and by more developed states and municipalities winning a disproportionate share of resources on the basis of their comparative advantage in the preparation of subprojects. The risk of funding poorly justified subprojects would be minimized by regularly reviewing eligibility and appraisal criteria for subprojects, by prior review of large projects by the MoH and the Banks and by the using the results of the ongoing ex post evaluation of a sample of subprojects as a means to improve project implementation. The MoH and the Banks will revise the process of subproject evaluation through a joint exercise applied to the first round of project proposals; this way, criteria for selection and evaluation of subprojects will be adjusted if necessary. The administrative capacity of the Ministry would be strengthened by BNDES and by Banco do Brasil which would be project's financial agents, and by contracted consulting services for subproject preparation and supervision, as well as for external evaluations and audits. The risk of richer states and municipalities winning a disproportionate share of resources would be minimized by estimating the investment need on the basis of population, health and income indicators, and existing capacity, by assisting states and municipalities which demand less than the estimated need, and by requiring different levels of cofinancing from states and municipalities, again on the basis of income and health indicators and existing capacity.
- 5.15 Finally, health sector revenues may not be enough to finance the incremental recurrent costs which will be generated by the project and adjustments in the reimbursement schedules which will be necessary to maintain capital. The risk would be minimized by making each year's investment decisions depend on the public expenditure review and health sector budget proposal, to make sure that the fiscal impact of the ongoing and the proposed investments are sustainable. Moreover, the project introduces new ways to either increase or to use more efficiently existing financial resources in the system, such as fraud control and cost recovery from privately insured patients.

D. Beneficiaries

- 5.16 REFORSUS would finance subprojects to municipalities, states, and non-profit health care providers to benefit directly the 110 million who depend exclusively on the SUS for their health care. The poor depend exclusively on SUS for health care provision and at present not even most cost-effective interventions are properly being delivered to them. The program benefits directly the poor by improving the quality of health care provision, and by stimulating the production and delivery of a list of most cost-effective interventions demanded by the poor, through among other measures,

the adjustment of its reimbursement rates. The project would also target the poor by: (i) pre-assigning grant ceilings to different states on the basis of poverty indicators, among others; and by (ii) requiring differentiated counterpart funds from municipalities, states, and charities, again on the basis of poverty indicators. To determine the leverage that beneficiaries have on the choice of subprojects and allocation of investments, and how they evaluate the impact of REFORSUS, a beneficiary assessment (BA) will be undertaken during project implementation. The BA will focus its attention on: (i) the process through which subprojects are generated in municipalities; (ii) the state-level decision-making process through which projects are to be financed.

BRAZIL
HEALTH SECTOR REFORM (BR-0199)
-REFORSUS-

I. PROPOSED SECTORAL POLICY CONDITIONALLY MATRIX ^{1/}

Objectives	Negotiation, May 1996	November 30, 1997	November 30, 1998
State compensation for providers	B.1 Proposal to reimburse the full cost of Priority 1 interventions. Reimbursement of other interventions raised with inflation	C.1 Reimbursement schedule covering the full cost of Priority 1 interventions and 75-85% of costs of Priority 2 interventions, depending on fiscal sustainability. Priority 3 interventions reimbursement raised with inflation	D.1 Reimbursement schedule covering the full cost of Priority 1 interventions and 75-85% of costs of Priority 2 interventions, depending on fiscal sustainability. Priority 3 interventions reimbursement raised with inflation
System with revenue	B.3 Agree on Priority 1 interventions of highly cost effective interventions B.4 Agree on financial requirements of SUS for 1997 and on satisfactory execution of the 1995 budget B.5 Introduce legislation in Congress to allow cost-recovery from the care provided in the SUS to privately insured patients	C.3 Agree on Priority 2 interventions of moderately cost effective interventions and on the remaining Priority 3 interventions. C.4 Agree on financial requirements of SUS for 1998 and on satisfactory execution of the 1996 and of the first nine months of the 1997 budget	D.4 Agree on financial requirements of SUS for 1998 and on satisfactory execution of the 1997 and of the first nine months of the 1998 budget
	B.6 National Audit System at federal, state and municipal levels. Satisfactory 1995 fraud control activity report	C.6 Audit system active in 8 states and 150 municipalities. Satisfactory 1996 fraud control activity report.	D.6 Audit system active in 8 states and 400 municipalities. Satisfactory 1997 fraud control activity report.
Global public health and improve equity of allocation	B.7 Global health budgets for at least 20% of federal health transfers to states and municipalities. B.8 Formula for automatic allocation of budgets to states and municipalities, including income, health and existing supply.	C.7 Global health budgets for at least 30% of federal health transfers to states and municipalities	D.7 Global health budgets for at least 60% of federal health transfers to states and municipalities
on	Four states and 80 municipalities with advanced autonomy		

to this Matrix is the Letter of Health Policy signed by the Minister of Health and submitted to the Bank.

BRAZIL

Health Sector Reform Project -- REFORSUS

LETTER OF HEALTH POLICY

AVISO/MS/No.486/GM

Brasilia DF, July 2, 1996

To the President

Dear Sir:

I have the honor to write to you for the purpose of presenting the proposal for the REFORSUS Project, "Strengthening the Reorganization of the Single Health System," to be carried out by this Ministry. This project is based on the need to guarantee that the principles of equity and universality are observed in the Single Health System (SUS), in accordance with the laws governing the health sector in Brazil.

Over the past ten years, the reorganization of Brazil's health system has brought about significant changes in the legal, managerial, and institutional aspects of the system, especially by unifying and decentralizing activities. The 1988 Federal Constitution, with its repercussions on the State Constitutions (1989) and the Municipal Organic Laws (1990), and Federal Laws Nos. 8080/90 and 8142/90, provides a legal framework that is conducive to and provides an incentive for basic changes in the health system.

In 1993, with the publication of the Health Ministry's Basic Operating Rule 01/93, the terms governing the decentralization process were introduced. It provided for the management of the health network to be decentralized gradually, in stages. Management conditions were introduced for states and municipalities, under which they would increasingly take over management of resources transferred by the federal government. In addition, forums for interinstitutional negotiations were set up, including the Tripartite Intermanagement Committee at federal level and the Bipartite Intermanagement Committee at state level, made up of representatives of the Ministry of Health, states, and municipalities and formed for the purpose of negotiating, drawing up proposals, and monitoring the introduction and operation of the SUS, under the supervision of the National and State Health Councils.

This process of organizational reform has not been accompanied by increased financing for the sector. On the contrary, flows of financial resources into the sector have continued to be limited and have even been further reduced. In view of the volatility of this financing and the lack of an adequate remuneration policy for service providers, investment has declined and the quality of services rendered has dropped sharply. Both public health care units and supplementary private

ones have become noticeably obsolete, and inequalities and deficiencies in health care coverage and hygiene have worsened. Fees of health care providers have lagged so far behind the average cost of services that philanthropic hospitals, the backbone of the public health system, have shut down units or dropped out of the system, while public hospitals have reduced the number of beds and the range of services offered.

This deterioration has forced the present government to look for ways to remedy the situation. One way is to further the decentralization process initiated in 1993, by strengthening the Bipartite and Tripartite Committees, by allowing states and municipalities greater autonomy in management, and by guaranteeing a larger volume of federal resources to be transferred as part of the general budget. This process is being consolidated through the new SUS Basic Operating Rule, meant to further the decentralization process by including automatic, direct transfers of financial resources to states and by giving greater responsibility for operating the SUS to State and Municipal Health Secretariats. The Rule is also intended to revise the basis of the system for paying for services provided by focusing on per capita remuneration for primary health care and to define a list of incentives to accelerate the reform process.

In addition to these changes in the Basic Operating Rule, the Ministry of Health has also endeavored to do the following: ensure adequate compensation to health care providers; protect the system from subsequent deterioration by making the necessary changes; reduce fraud and increase the quality of services; provide for a more equitable allocation of resources to cover current and capital costs; and, control and stabilize expenditures.

In its effort to guarantee that health care providers receive adequate compensation for their services, in 1995 the Ministry granted a 25% cost of living adjustment in hospital and outpatient procedures, and ~~established a price negotiation board made up of managers and representatives of service providers.~~ We also intend to introduce a mechanism for the regular revision of health care service providers' fee schedules and to update them on the basis of estimates that are closer to the cost of current health care practices. In addition, we plan to publish new fee schedules including differential adjustments based on which procedures are most cost-effective and full payment for diagnostic or treatment procedures.

We initiated efforts to protect the system against future deterioration by seeking new sources of revenue in 1995, in the form of a bill presented to the National Congress to recover costs of care provided to patients covered by supplementary health insurance, and by revising tax exemptions for private health care services. Once the law permitting this compensation has been promulgated, adequate operating tools will be immediately introduced to make this cost recovery viable.

It was our concern to reduce fraud and guarantee the quality of services that led to the introduction of Decree No. 1651/95, which was signed by the President of the Republic and regulates the National Audit System (SNA), and to the creation of the National Quality Health Care Committee. Regulations are being drawn up and cases of fraud and irregularities are being analyzed from a qualitative and quantitative standpoint. In 1995, 2 million hospital stays for a total of 15 million, or about R\$500 million, were paid as a result of these analyses. To increase the

quality of health sector services, tools to monitor adverse results in maternity clinics were developed. This program will be expanded to cover other types of establishments in the next three years, and there are also plans to introduce quality control mechanisms in hospitals and outpatient units, among other activities, between now and 1998.

To ensure a more equitable allocation of resources to cover current and investment costs, overall ceilings were established, to include hospital and outpatient care. They were based on the integrated programs which were agreed with the Bipartite Committees and which provide for a prioritized supply of health services and parameters applicable to the demand for those services. In the area of primary health care, a per capita remuneration arrangement is being worked out to guarantee that all citizens will be treated equally. As for the allocation of resources for investment, a formula was devised to compensate those states and municipalities with fewer health care services and thus with reduced public expenditures, so as to increase coverage of the population. In the medium run, these instruments will be improved, to increase gradually the percentage of resources to cover current and investment expenditures distributed to states and municipalities on the basis of more equitable criteria. In this same area, 87 municipalities were granted greater autonomy to manage their health sectors (partial management conditions). Once the new Operating Rule is in effect, this number will be increased and procedures will be introduced for automatic transfers of resources to states that have already officially qualified for management autonomy.

As for control and stabilization of expenditures, in the short run the government is increasing transfers to municipalities under the general budget. It plans to extend this process to new municipalities and states in the course of this year. In addition, it is introducing mechanisms to assess and manage the dissemination of new technologies to the SUS.

The program to consolidate the SUS, which was initiated in 1995 and is expected to last into the next decade, is based on a decentralized management model according to which the states and municipalities will assume full responsibility and autonomy and will have the management capacity and the capacity to implement the policies required for the purpose. Under this organization plan, the Ministry of Health will fulfill the essential function of making sure that the supply of services does not become fragmented and scattered, and that the regional, hierarchical system is operating smoothly.

By the end of this period, all federal funding should be automatically transferred to municipalities, which will be directly responsible for supplying services to the people, and secondarily to states, so that they can perform their functions of coordinating the system and take action to ensure equal access and quality services. The allocation of these resources will be based on an integrated financial and physical program determined in the interinstitutional forums.

By using various incentives, and especially financing arrangements, the Health Ministry will try to systematically raise fee levels for all health care services and activities that show unquestionable proof of being effective, and it will give priority to those that are recognized to be most cost-effective, based on their history of cost-of-living adjustments, average national costs in comparison with others, or on the fact that they have been given priority in programs for

determining the general budgets of states and municipalities. Thus, in the course of the next ten years, the supply profile will be redesigned, with an increase in effective and cost-effective services, to the detriment of those that have not proven to be so.

Activities under the REFORSUS Project, especially if they continue throughout the decade, will make it possible to halt the steady deterioration of the physical infrastructure and correct the critical shortcomings in management, while reducing fraud to a minimum and guaranteeing acceptable quality standards for health care services. In the short and medium term, when the legislature passes the proposed constitutional amendment, which is already being discussed by the National Congress, there should be stable and regular sources of a viable amount of funding for the SUS.

In summary, by 2005 the SUS should be operating on the basis of universality, with an equitable allocation of resources, and full decentralization of management functions. The sources, flows, and amounts of resources should be enough to ensure adequate remuneration for the services provided, and especially for those procedures that were selected to be given priority.

It is in this context and with these prospects in mind that this project has been prepared, for the purpose of improving the physical infrastructure of the health care system, and the efficiency, management, and quality of the health care system financed by the government and directed on a priority basis to provide care for the most vulnerable segments of our population.

I am looking forward to receiving your cooperation.

Very truly yours,

ADIB JATENE
Health Minister

BRAZIL

HEALTH SECTOR REFORM PROJECT -- REFORSUS

KEY PERFORMANCE INDICATORS

The following indicators would be reviewed during the annual reviews. Twelve of them, to be agreed with the Bo negotiations, would serve as the key performance indicators.

Indicators	Baseline 1996	1997	1998	1999	Ta
Improvement of Health Care Delivery					
<i>Input</i>					
1. (*) Amount disbursed in subprojects		13%	50%	77%	
<i>Process</i>					
2.. (*) Proportion of hospitals with at least two of the following MIS: cost accounting, billing and cost recovery, maternal care standards, and safe handling and disposal of hazardous medical wastes and materials,					150 an
<i>Output</i>					
4. Hospital admissions per 100 population		10			
5. Ambulatory visits per capita	2.3/pers/year				2.
6. Proportion of pregnancies with prenatal care	(unknown now)				
7. Proportion of children aged 5 with full immunization	63%				
<i>Output /Input</i>					
8. Average hospital occupancy rate (in those states where this information is collected; not available nationally), and number of states where collected	(unknown now)				
9. Average hospital length of stay					
10. Cost per 5 tracer conditions (to be agreed) in a sample of establishments					
<i>Outcome</i>					
11. Maternal mortality ratio	38/10,000				
12. Injury related fatality rate					
13. Hospital mortality rate					
14. Hospital infection rate (in those states where data are collected) and number of states with this information					

Improving Health Care Financing

Process

15. Arrears in reimbursements	45 days	< than
16. (*) Proportion of cost reimbursed for List A interventions (highest cost effectiveness)	50 % (rough average estimate)	
17. (*) Proportion of cost reimbursed for List B interventions (medium cost effectiveness)	50 % (rough average estimate)	
18. (*) Proportion of federal reimbursement budget financing list A, after price adjustment		
19. (*) Proportion of SUS hospitals recovering costs from privately insured patients	---	
20. Number of states and municipalities with advanced autonomy	4 states & 56 munic	8 states
21 Number of states and municipalities with active audit systems	---	8 states
22. Proportion of recurrent budgets transferred automatically to states and municipalities as block grants or capitation	20 %	
23. Proportion of Federal, state, municipal and private health expenditures in total health expenditures		
24. Federal Health Expenditure as % of GDP	2.6%	

HEALTH SECTOR REFORM PROJECT

Annual Reviews

1. The annual reviews would be carried out by a combination of Bank staff and consultants with specialties in public health administration, health economics, institutional development and management information systems. The reviews would be prepared by the PCU, and would include reviews of project implementation reports, discussions with the management of the MoH, and visits to selected states. The reviews would take place in November of each year. The annual reviews would evaluate project performance against implementation plans and agreed targets and provide Bank and MOH management with feedback on project achievements. More specifically, the annual reviews would:

- (a) review implementation of both project components during previous year, including commitments, disbursements, and compliance with benchmarks;
- (b) compare actual results with the program as regards: (i) allocation of funds among states, and (ii) allocation of funds among large projects for completion and equipment of state and municipal hospitals, projects presented by philanthropic hospitals, and small and medium projects;
- (c) review financial and procurement audits;
- (d) review ex-post beneficiary assessments;
- (e) review compliance with loan agreement covenants and Bank guidelines;
- (f) review overall implementation of health sector strategy, as described in policy letter;
- (g) review financial performance under SUS during previous year, and agree on satisfactory financial performance for the next year (as contemplated in the policy matrix);
- (h) review adjustments in reimbursement schedules (as contemplated in the policy matrix);
- (i) review timelines of payment of health services (as contemplated in the policy matrix);
- (j) review implementation of national audit system to reduce fraud (as

contemplated in the policy matrix);

- (k) review implementation of quality assurance program (as contemplated in the policy matrix); and
- (l) review progress in implementation of studies and technical assistance.

2. The annual reviews would also analyze the performance of the PCU (including its regional technical assistance units - URATs) in terms of project implementation and coordination of executing actions by the MOH, the states and the municipalities. They would assess the extent to which the project management information system is adequate to provide the appropriate information for decision-making and reporting to financial institutions, including the Bank. The composition of the PCU would be analyzed to assess if it is adequate to provide adequate technical support to the executing units.

3. The annual reviews would address project performance in terms of flow of funds, as contemplated in the contract between the MOH and Banco do Brasil. They will also review the quality of economic analysis of large projects and efficiency in contracting of consulting services, as provided for in the contract between the MoH and BNDES.

4. On the basis of the above, the Bank and MoH will agree on:

- (a) main issues in project implementation;
- (b) proposed modifications to project design, if needed, to adjust to changing circumstances; and
- (c) work plan for the coming period.

PROPOSED RESOLUTION

BRAZIL. LOAN /OC-BR. TO THE REPUBLICA FEDERATIVA DO BRASIL
(Health Sector Reform Project)

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Federative Republic of Brazil, as Borrower, for the purpose of granting a financing to cooperate in the execution of Health Sector Reform Project. Such financing will be for the amount of up to three hundred and fifty million dollars of the United States of America (US\$350,000,000), or its equivalent in other currencies, except that of Brazil, which are part of the Ordinary Capital resources of the bank, and it will be subject to the "Special Contractual Conditions" and the "Terms and Financial Conditions" of the Executive Summary of the Loan Proposal.