

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Developing Country Debt and Economic Performance, Volume 2: The Country Studies -- Argentina, Bolivia, Brazil, Mexico

Volume Author/Editor: Jeffrey D. Sachs, editor

Volume Publisher: University of Chicago Press, 1990

Volume ISBN: 0-226-73333-5

Volume URL: http://www.nber.org/books/sach90-1

Conference Date: September 21-23, 1987

Publication Date: January 1990

Chapter Title: State Capitalism and the Operation of the Public Sector

Chapter Author: Juan Antonio Morales, Jeffrey D. Sachs

Chapter URL: http://www.nber.org/chapters/c8935

Chapter pages in book: (p. 189 - 202)

tion, and expenditure cutting in the state enterprises, especially in the mining company COMIBOL; (3) reform in the trade regime, aiming at the elimination of most barriers to international trade and the implementation of a flat tariff schedule; and (4) normalization of Bolivia's access to international financial flows from the official creditor community (i.e., the IMF, the World Bank, the IDB, and bilateral creditors).

The political base for implementing this enormous program was established in a crucial Pact for Democracy signed by Paz's MNR and Banzer's party, Acción Democratica Nacionalista (ADN). This agreement established a congressional majority sufficient to put through the Congress the key features of Supreme Decree 21060. The pact allowed the decree to take effect in the context of democracy, a remarkable accomplishment in view of Bolivia's volatile political institutions and its vulnerable position amongst politically unstable neighbors in the region. With the pact, the Paz government reserved important positions in state enterprises for members of Banzer's ADN party. In addition to the political base of the MNR and ADN, Paz also had strong support in the business community. Several prominent businessmen, some who had been head of the CEPB, were given top Cabinet posts.

The structural reforms did away with the state-capitalism model, with its several variants, that had been followed since the Revolution of 1952. The reforms were carried out with a remarkable smoothness. Of course, there was some bitter opposition, particularly in the labor unions and in the parties of the left, as well as lively criticism in the press, but the changes were peaceful and in the framework of democratic institutions. At no point during Paz's administration was the process of reform imperiled.

# 3 State Capitalism and the Operation of the Public Sector

This chapter focuses on the strategy of state capitalism as the model of development in Bolivia during 1952–85 and particularly on the role of public finances, public investment spending, and trade policy in that period. We have already stressed that the Bolivian debt crisis in the 1980s, and the economic crisis more generally, can be traced largely to insufficient domestic savings and to a very weak public sector, despite the central role assigned to the public sector in the development strategy.

The main point that we emphasize is that while the government faced large and politically urgent demands for spending—on, for example, the wages of public sector workers, social objectives (e.g., health and edu-

cation), the military, and foreign debt servicing—the tax base for financing these expenditures had always been extremely fragile. Domestic revenues were generally adequate only during periods of high foreign prices of raw materials. When export prices fell, governments generally tried to maintain spending with funds borrowed from abroad. The real crises arose when neither high export prices nor foreign loans could sustain the level of government spending. Thus, after 1980 and before the stabilization program of 1985, the government was forced to rely heavily on the inflation tax.

As a general point regarding the structure of government revenues, the important thing to notice is that revenues were collected primarily through production taxes and foreign trade taxes, collected from a small number of activities undertaken by a handful of enterprises. Many, but not all, of those enterprises were publicly owned. The tax structure can be seen in table 3.1, from Breuer (1988). In 1976, for example, taxes from trade, state enterprises, and private mining (which is a production tax on an export good) accounted for 49.7 percent of the overall tax revenues. These three sources proved to be highly unstable during the 1980s as real tax revenues fell sharply. Trade taxes fell as a rising share of trade went through the black market; state enterprise taxes fell as profitability of the state sector declined, partly as the result of unrealistic pricing; and private mining profits fell, partly due to terms-of-trade decline and partly due to a failure of collections.

With a tax structure as in Bolivia, the search for tax revenue was easily confounded with the search for investment opportunities for the public sector that could yield those revenues. Nobody was better equipped, it was asserted, than the public sector to seize large investment opportunities, and the public sector needed the revenues in order to finance the balance of its expenditures.

In this setting, the heavy emphasis on public investment projects combined with the allocation of public sector revenues, necessitated a development plan. From 1956 until 1985, the governments emphasized economic development based on public sector planning. The design and implementation of

| Table 3.1         | Tax Structure in | Bolivia, 1972-8 | 0     |       | _     |
|-------------------|------------------|-----------------|-------|-------|-------|
|                   | 1972             | 1974            | 1976  | 1978  | 1980  |
| Direct taxes      | 25.3             | 43.4            | 46.6  | 45.7  | 45.5  |
| State enterprises | 8.9              | 28.7            | 24.8  | 22.5  | 23.2  |
| Private mining    | .0               | 7.4             | 3.8   | 4.7   | 4.0   |
| Other             | 16.5             | 7.4             | 18.0  | 18.6  | 18.2  |
| Indirect taxes    | 74.7             | 56.6            | 53.4  | 54.3  | 54.5  |
| Trade             | 31.6             | 18.9            | 21.1  | 23.3  | 20.2  |
| Excise            | 8.9              | 4.9             | 4.5   | 7.0   | 6.1   |
| Sales             | 6.3              | 3.3             | 3.8   | 5.4   | 6.1   |
| Other             | 27.8             | 29.5            | 24.1  | 18.6  | 22.2  |
| Total             | 100.0            | 100.0           | 100.0 | 100.0 | 100.0 |

Sources: Breuer (1988), table 5.1(B), which is based on estimates supplied by UDAPE in the Ministry of Planning, Bolivia.

development plans were considered essential for rapid economic growth in the productive and distributive spheres. The common view on the topic over a long period was that centralized planning should be compulsory for the public sector and indicative for the private sector.

In this chapter substantial space is devoted to the public sector investment projects as they were framed in development plans, the main conceptions of which shed some light on the projects themselves. Indeed, the policy of investing public income and publicly guaranteed loans in huge projects of resource-based industrialization cannot be fully understood without appealing to the main conceptions on development as reflected in the development plans. Unfortunately, failed public investments, together with the narrowness and vulnerability of the tax base, are the main sources of the eventual collapse of the public sector.

## 3.1 The Mature State-Capitalism Model, 1969-84

The most important feature of the state-capitalism model is the degree of intervention of the government in the economy. In 1975, for example, the GDP generated in the public sector accounted for 22 percent of total GDP, while in 1982 this ratio reached a high of 28 percent. The data in table 3.2 are even more telling, as they show the very high share of public sector investment in total investment spending. During 1965–69, the public investment share in total investment was 51 percent; by 1975, the share decreased slightly to 48 percent; during 1976–80, it increased again, reaching an average of 60.4 percent. From 1981 to 1985, the ratio fell sharply because of the deep cuts in public investment spending during the financial crisis. It may be noted that from 1970 on, the years of high *private* investment rates are also associated with strong investment rates of the public sector. This is in part a manifestation of state capitalism, in that

| Table 3.2 | Public and Private Participation in Gross Fixed Capital Formation |
|-----------|---|
|           | (in percentages)  |

| 7 | Year | Public | Private | Year | Public | Private |
|---|------|--------|---------|------|--------|---------|
|   | 958  | 42     | 58      | 1970 | 56     | 44      |
| 1 | 959  | 40     | 60      | 1971 | 60     | 40      |
| 1 | 960  | 44     | 56      | 1972 | 59     | 41      |
| 1 | 961  | 45     | 55      | 1973 | 37     | 63      |
| 1 | 962  | 54     | 46      | 1974 | 34     | 66      |
| 1 | 963  | 62     | 38      | 1975 | 41     | 59      |
| 1 | 964  | 60     | 40      | 1976 | 56     | 44      |
| 1 | 965  | 43     | 57      | 1977 | 64     | 36      |
| j | 966  | 50     | 50      | 1978 | 66     | 34      |
| 1 | 967  | 50     | 50      | 1979 | 58     | 42      |
| j | 968  | 52     | 48      | 1980 | 58     | 42      |
| 1 | 969  | 59     | 41      |      |        |         |

Sources: Ministry of Planning and Central Bank of Bolivia.

private investment spending was often closely tied to specific public sector projects.

It is worth looking at some explicit statements of the state-capitalism model contained in several development plans formulated by various governments. Though the model has roots that go back to the Revolution and even before, we will focus our analysis on the 1969–84 period. In 1969 the left-wing populist government of General Ovando presented to the nation a Socioeconomic Strategy for National Development (SSND). The SSND was more "statist" and nationalistic than the ten-year plan prepared by the MNR regime in 1962. The SSND clearly defined a long-run vision of state-led growth, with many "strategic sectors" of production that were reserved to the public enterprises. The SSND targeted an increase in domestic saving based on the retained surpluses of the enterprises in the public sector; as a counterpart, and consistent with a nationalistic ideology, it called for a reduction of foreign savings through cuts in foreign direct investment and public external borrowing.

A very important feature of the SSND was the emphasis given to resource-based industrialization. A key theme was that big operating surpluses can be generated in the state enterprises in the resource sectors, which in turn can be reinvested in other sectors. In addition, the SSND, in a clear case of misjudgment, relied quite heavily for the industrialization program on the market prospects offered by the economic integration scheme of the Andean Group Pact of 1969, formed by Bolivia, Colombia, Ecuador, Peru, and Venezuela (Chile belonged originally, but quit in 1976). With regard to agriculture, the SSND advocated a more communitarian organization of production, with strong emphasis on cooperatives and technological improvements.<sup>3</sup>

The SSND was short-lived, abandoned by President Banzer in 1972. However, the SSND exerted a powerful influence on the formation of ideas in Bolivia that went well beyond 1972. The strongly nationalistic nature of the SSND appealed to the left in the Bolivian political spectrum and, ironically, to many high-ranking officers in the military. In fact, the state-capitalism model reached its peak during the government of General Banzer and, although we can trace the origins of Banzer's model to the Revolution of 1952, many of the most important concepts came from the SSND.

The expansion of the public sector, especially as a producer of goods and services that could, under appropriate policies, be provided by private enterprises, indeed constitutes the landmark of the Banzer years. But this did not mean a confrontation with the private sector; instead, the policies of the Banzer regime aimed at a symbiotic relationship between the public and private sectors. Moreover, and this needs to be underscored, the public enterprises served frequently as a mechanism to transfer state-owned (or state-guaranteed) resources to privileged groups in the private sector. Access

to government officials and government contracts were considered the most important asset from the viewpoint of many private sector businessmen.

On the basis of research in progress, Ugarteche (1986) and Rivas (1986) claim that the main beneficiaries of the public sector external debt accumulated in the Banzer period were private sector supporters of the Banzer regime. Also, public employment was increased substantially between 1971 and 1978: many new public enterprises were created, and the government asserted its monopoly over the developments in the new mining sectors (especially iron), as well as in the commercialization of tin and metals.

In 1975 Banzer announced a five-year development plan. In the summary of the plan given by Malloy and Borzutszky (1982), the following points stand out: (1) the plan's aim was export-led growth accompanied by selective import substitution; (2) it gave the preponderant role to the public sector, targeting the public sector for 71 percent of total investment spending; (3) it allocated public investment primarily to the production of hydrocarbons; (4) it divided the nation into three investment zones: a primary zone of La Paz-Cochabamba-Santa Cruz, a secondary zone of Oruro-Potosi-Chuquisaca, and a tertiary zone of Beni and Pando, with the share in total investment of the primary zone to be 63 percent; and (5) it paid relatively scant attention to the peasantry.

Most of Banzer's five-year plan was never put in place. Two factors accounted for the failure to implement the plan. First, the financing of the plan was heavily dependent on Bolivian petroleum exports which failed to materialize. Second, the public administration did not adhere to the guidelines for the allocation of investment, so that many public investment projects were undertaken without due consideration for the investment allocations outlined in the plan. As this practice became common, the plan became wholly unenforceable.

In the SSND and the five-year plan (as well as in the MNR's 1962 ten-year plan), traditional exports occupy the center stage. In all of these plans, the expansion of traditional exports was deemed to be the "locomotive" of development, with the rest of the sectors of the economy following along. It has to be emphasized that nowhere was the conception of Bolivia as an export economy abandoned in favor of, for instance, import-substituting activities on a large scale. Planners and government bureaucrats did look on an expansion of a protected light manufacturing sector with some sympathy, but they did not think, given the smallness of the domestic market, that this sector could be the engine of rapid economic growth in the near future. Hopes were always placed on growth led by exports of primary commodities.

The model of export-led growth embodied in the development plans that we have discussed differed significantly from the traditional pattern of growth, as well as from the export-led models in the newly industrialized countries (NICs). In contrast to the traditional pattern, based on the export of

a few primary products, the development plans aimed at a more diversified export basket, with the production of commodity-based goods having more domestic value added (e.g., the export of metals instead of mineral ores, and refined sugars and oils instead of the crude varieties). Unlike in the strategy of the NICs, there was little emphasis on the export of manufactures, except for some belated attempts in the context of the Andean Pact market. With the emphasis on petroleum and mineral exports, policymakers placed little importance on exchange rate management to promote new exports or on the deepening of domestic financial markets, though exchange rate and financial policies had played a crucial role in the successful takeoff of the NICs (cf. Tsiang 1986).

The military successors of Banzer, by and large, tried to continue with the state-capitalism model. The civilian governments of Walter Guevara Arze and Lidia Gueiler attempted to follow a somewhat less "statist" course, but their efforts were curtailed by strong political adversities. In 1984 one more attempt was made to develop a plan, with the "National Development Strategy and Four-Year Plan." Three different versions of the plan were offered to the public. Because of the internal squabbles of the coalition partners in the Unión Democratica Popular (UDP) governments in 1984–85 and the high priority given to the inflation problem, no real importance was attached to any of the versions by the government or the public.

# 3.1.1 Public Investment Spending in the State-Capitalism Model

The deficiencies of planning were nowhere more revealed than in the execution of public investment projects. A full evaluation of investments in the very capital-intensive projects has yet to be made. Ideally, information should be gathered for an ex ante and ex post evaluation of each major project undertaken in the 1970s and up until 1985. Short of that, we may note the following points. First, many large projects responded more to noneconomic factors (prestige, national security, etc.) than to profitability, measured either in private or social terms. Second, grave mistakes were made in evaluating the endowments of natural resources. For example, overoptimistic assessments of oil and mineral reserves led to overinvestment in these industries. Third, the cost-benefit analyses performed before undertaking the projects were either incomplete or were ignored in the implementation phase. Fourth, the large projects were typically financed with expensive suppliers' credits and foreign bank loans. The conditions of repayment were, from the start, likely to create problems in the cash-flow stream. Fifth, when the projects were financed with official loans, delays in disbursements often disrupted the investment schedules. Sixth, the execution of the projects was extremely poor, with frequent but avoidable long delays in deliveries and construction.

Contrary to what occurred in other debtor countries, public investment was largely directed to sectors producing tradables or to physical infrastructure,

and even in the last case, infrastructure served primarily for the production of tradables. The problem in Bolivia was not an excessive allocation of investment to nontradables, but rather the highly inefficient choice and execution of investment projects within the tradables sector. Political and regional pressures, as well as specific vested interests, held great sway over the selection of investment projects and the procurement of construction and supply contracts. Graft, of course, was a very important factor—kickbacks and unwarranted cost overruns were the order of the day.

Several examples illustrate the assertion of investment mismanagement: the uneconomical expansion of the tin smelters of the ENAF company in Vinto; the huge Karachipampa polymetallurgic smelter in Oruro for which there were no minerals; the expansions in oil-refining capacity in Santa Cruz and Cochabamba when oil production was declining at a rapid rate; the refinery for soya oil built close to the Paraguayan border, so far away from producing and marketing areas that transportation costs made it completely unprofitable; the very modern international airport of Viru-Viru in Santa Cruz, with a traffic load of no more than fifteen planes a day in 1987; the high-cost military-run truck assembly plant of Cochabamba; and so on.

Even when some projects could have been reasonably profitable under the right circumstances, cost overruns and technical misjudgments impaired profitability. For instance, the COMIBOL plant for the treatment of low-grade ores in La Palca was planned to be built in two years, yet after ten years it was still unfinished. Similarly, there is the sugar refining mill of Guabira, the abnormally high costs of which were essentially due to poor financial management that systematically delayed the sugar harvest by its suppliers, therefore causing a strong fall in the saccharose content of the inputs.

It is interesting to note that *private* investment projects financed with foreign resources and public guarantees also showed poor performance, and substantial arrears were quickly built up after the loans were made. Loans to private firms that were guaranteed by the public sector institution, Banco del Estado, were used in white elephant projects and had a very low probability of being repaid. Similarly, the foreign loans channelled through the state-owned agricultural bank, Banco Agricola Boliviano, to large farmers in the eastern lowlands suffered extensive defaults.

# 3.1.2 State Enterprises in the State-Capitalism Model

The public enterprises were, during 1952-85, the main hope for economic development but also the Achilles' heel of the public sector. As was shown before, the size of the Bolivian public sector relative to GDP has been considerable, far above the average in Latin America. Up to 1983, most of the larger public enterprises were able to generate savings in spite of adverse macroeconomic policies (mainly overvalued exchange rates), poor management, and labor indiscipline. Two exceptions were COMIBOL,

which already showed current account losses in 1980 (and chronic overall deficits, when account is taken of investment spending) and the smelting company, ENAF, which had troubles since its inception. For the other firms, however, the savings were usually insufficient to finance capital investment and debt servicing. As a result, the public enterprises were among the main borrowers internationally, as an increasing share of their capital outlays in the 1970s were financed by foreign savings.

For several reasons, however, it is very difficult to evaluate with any accuracy the performance of individual enterprises. There are simply too many distortions in financing and pricing to make such a retrospective analysis feasible. Complex cross-subsidies among the state-owned enterprises distort the measured profitability of individual firms. A case in point is that of ENAF, which was heavily subsidized by COMIBOL. Also, the National Enterprise of Electricity (ENDE) subsidized all the other public companies through low electricity tariffs.

A further complexity in evaluating the state enterprises is the need to place the enterprises in a macroeconomic context, while also taking careful account of trends in the international economy. The net incomes of the state enterprises are much more sensitive to macroeconomic policies than are the profits of private sector enterprises. The temptation to suppress the symptoms of inflation by manipulating the prices of the public enterprises or by delaying a devaluation of the official exchange rate, for example, is a constant danger. Lags during 1982–85 in raising public sector prices (especially petroleum products) and in devaluing the official exchange rate brought heavy losses to the public enterprises. As we shall note in chapter 5, the complete mismanagement of prices of publicly provided goods was an essential feature of Bolivian policymaking in 1982–85.

To help understand the behavioral choices of the state enterprises in Bolivia, it is relevant to introduce here the concept of the soft budget constraint, as introduced by Kornai (1986) to explain the behavior of public sector firms in socialist economies. The essential idea is that normal budgetary constraints on a firm's behavior do not hold in socialist economies since the firm's managers know that in case of trouble, the firm will be bailed out by subsidies or credits from the central government. As Kornai points out, this leads to a nearly insatiable demand for public sector credit, since "sooner or later it can expect to be able to cover its costs on input, and if its proceeds on sales of output are insufficient, it will be able to cover costs from an external financial source" (44). Also, state enterprises facing a soft budget constraint lack incentives and sanctions to stick to their production goals and to limits on use of resources.

This situation characterized most state enterprises in Bolivia during the period up to 1985 (and to some extent afterward). During the 1970s, individual firms could borrow internationally on the full faith and credit of the central government. There were few bureaucratic constraints that re-

strained them from doing so, with the result, as we saw in the previous section, of a series of disastrously inefficient and uneconomical investment projects. The problem of soft budget constraints was especially severe during the high-inflation years of 1982–85. It was relatively easy to find ways to escape the budget constraints, for instance by delaying tax payments of the enterprises to the central government, accumulating liabilities and then shifting them to the Treasury, gaining access to heavily subsidized Central Bank loans, or contracting foreign debt beyond their needs when they could.

Many state enterprises also suffered from a confusion of objectives: they were asked to generate profits to be reinvested, as well as to be shifted to other sectors; to generate employment, frequently as a disguised scheme of unemployment compensation; to provide education and health services to workers plus their families; and to act as a retirement fund and as a means to channel subsidies to the general consumer. This multiplicity of objectives impaired their normal functioning, as might be suspected.

Most perniciously, state enterprises were used as a form of political patronage and spoils to bolster the political power base of the government. For this reason, employment in state enterprises increased remarkably rapidly in the 1970s, far outstripping the growth of population and the economy in general. Between 1970 and 1982, state enterprise employment rose at an annual rate of 4.6 percent. Political pressures played an important role in the expansion of jobs during these years. In fact, a nonnegligible part of the support for the Banzer government and the succeeding military regimes was the willingness to create employment in the public sector. The return to democracy in 1982 was also accompanied by a big spurt in the expansion of jobs in the most important public enterprises, particularly in COMIBOL. The distribution of sectoral ministries and public enterprises among the parties in the UDP coalition led to an unrestrained race of political patronage. The patronage of the Communist Party, through the Ministry of Mines that it controlled, was especially notorious.

In the same vein, Rivas (1986), Ugarteche (1986), and many other Bolivian analysts also claim that it was through the mismanagement of public investment projects that the public foreign debt was diverted to private beneficiaries, often with political goals in mind. In this direct way, the public debt financed consumption and capital flight. While the government of Bolivia retained the commitments, the benefits were privatized.

#### 3.1.3 The Public Sector as "Shock Absorber" for External Shocks

The public sector was frequently used to absorb, at least temporarily, external shocks hitting the economy. For instance, while YPFB reaped some important benefits and the Treasury substantial taxes from the oil price increases of the 1970s, each of these could have been greater had the government not pursued a policy of heavily subsidizing domestic oil

consumption. The protection of some consumers from the oil shocks was made at the expense of taxes and profits for the oil enterprises. The opportunity costs of this policy were high. Moreover, as some oil products were smuggled out, the subsidies gave much to the *contrabandistas* (smugglers) in addition to the general consumer.

In some cases, not only opportunity costs were incurred but also heavy Treasury disbursements were spent in subsidies. For instance, when world prices of wheat and other grains climbed during 1974–75 and in 1979, domestic prices of wheat were kept constant, with the Treasury making up the difference between import prices and domestic prices. Moreover, the government established de facto price support schemes for some agricultural staples, like sugar and rice. These price support schemes were very costly in years of low international prices and good harvests.

The essential point is that the fiscal sector was used to isolate the economy from external fluctuations. When the shocks were transitory, this policy did not have important consequences. However, as adverse shocks frequently lasted longer than expected, significant debt accumulation ensued. The domestic price repercussions of those deficits went unnoticed as long as it was possible to finance them by borrowing from abroad. The government deficits that resulted from subsidies was one of the channels that led to the financing of consumption with foreign debt.

In some cases, the "shock absorber" function was used for the protection of a very narrow part of the elite. A good illustration is the case of cotton growers in the Santa Cruz region during the Banzer period. Tens of millions of dollars were loaned by the government's agricultural bank (Banco Agricola Boliviano) to a small number of large landowners during an incipient cotton boom. The Bolivian producers sold their crops forward on world markets, but then tried to renegotiate when the spot-market prices rose above the forward contract price. They failed in the renegotiations and, in the end, much of the cotton remained undelivered. The growers quietly defaulted on the agricultural bank loans and the government absorbed the losses with no attempt to collect or to foreclose on any property. To this day, the bad cotton loans have undermined the solvency of Banco Agricola.

#### 3.2 The Chronic Weakness of Public Sector Revenues

In Bolivia, the sources of income for the public sector have suffered from extreme fragmentation since the beginning of the Republic. Before the tax reform measures of 1986, there were many central government taxes with as many collecting agencies; local taxes; and taxes earmarked for regional development corporations, the state universities, and for the social security system. In part because of this extreme fragmentation and in part because of notoriously bad record keeping for tax collections, it is hard to make a precise quantitative assessment of the public revenue system.

The combined accounts of the central administration, the social security system, and the so-called decentralized agencies form the central government accounts. If one adds to the account of the central government the accounts of the local governments, this gives the general government accounts. The general government accounts together with the accounts of the nonfinancial state enterprises form the consolidated nonfinancial public sector. Note that transfers between parts of the system are very important for the consolidated nonfinancial public sector. Public enterprises pay taxes to (and on occasion receive subsidies from) the central administration and some local governments. Central administration transfers to the decentralized agencies and local governments are very substantial.

Finally, the quasi-fiscal activities of the financial public sector (i.e., the Central Bank of Bolivia, together with the state banking system) should be consolidated with the nonfinancial public sector accounts to get a comprehensive view of the fiscal activities of the overall public sector. Because of data limitations, this complete consolidation would be virtually impossible for historical data.

The best recorded data for the public sector are found for the account of the General Treasury of the Nation, TGN (Tesoro General Nacional), which handles the accounts for the central administration and which has traditionally been under the jurisdiction of the Ministry of Finance. We now turn to a look at revenues of the TGN.

#### 3.2.1 The Revenues of the General Administration

From 1961 to 1970, central administration revenues amounted to 8.0 percent of GDP on the average; in the next decade this ratio increased to 10.2 percent, with a slight rise in the second half of the decade compared with the first half. The maximum ratio of revenues to GDP of the TGN occurred in 1976 (12 percent of GDP). Data on revenues, expenditures, and the deficit, from Breuer (1988), are shown in table 3.3 for the years 1970 to 1984.

The rise in revenues as a percentage of GNP from the 1960s to the 1970s was due to a determined effort to improve tax administration and to an increase in the tax base because of the expansion in the value of exports during the 1970s. However, after 1979, inflation started to take its toll on the real value of tax collections, in line with the so-called Olivera-Tanzi effect (see Tanzi 1977), which predicts a negative relation between inflation rates and real tax collections. During the high inflation years, the TGN revenues were as low as 2.8 percent of GDP in 1984 (and fell to only about 1 percent of GDP in the first quarter of 1985!). We shall describe in chapter 5 more precisely how the high inflation made a shambles of the Bolivian tax system.

Changes in the structure of the TGN revenues should also be noted.<sup>5</sup> In the 1970s, taxes collected by the internal revenue service amounted to 34 percent of the TGN revenues, while taxes on the foreign sector, mainly

| or G | NF)      |              |         |  |
|------|----------|--------------|---------|--|
| Year | Revenues | Expenditures | Deficit |  |
| 1970 | 8.4      | 9.8          | 1.4     |  |
| 1971 | 7.9      | 10.0         | 2.1     |  |
| 1972 | 7.6      | 10.0         | 2.4     |  |
| 1973 | 9.1      | 10.6         | 1.5     |  |
| 1974 | 11.5     | 11.9         | .4      |  |
| 1975 | 11.3     | 12.6         | 1.3     |  |
| 1976 | 12.0     | 14.0         | 2.1     |  |
| 1977 | 11.5     | 13.8         | 2.2     |  |
| 1978 | 11.4     | 14.0         | 2.7     |  |
| 1979 | 9.4      | 14.3         | 4.9     |  |
| 1980 | 9.6      | 16.0         | 6.4     |  |
| 1981 | 9.4      | 15.1         | 5.6     |  |
| 1982 | 4.6      | 26.9         | 22.3    |  |
| 1983 | 2.6      | 20.1         | 17.5    |  |
| 1984 | 2.6      | 33.2         | 30.6    |  |

Table 3.3 Budget Revenues, Expenditures, and the Deficit, 1970-84 (as percentage of GNP)

Sources: Breuer (1988), table 5.5, which is based on estimates supplied by UDAPE in the Ministry of Planning, Bolivia.

import tariffs, represented 31 percent on the average. The remaining sources were production taxes on the mining and petroleum sectors, which averaged 31 percent. Property income and services provided by the central government yielded 4 percent of the TGN revenue. By the end of the hyperinflation, however, tax collections on internal income and on international trade had been sharply eroded. Only the taxes on petroleum production could be easily collected in the short term, even after the hyperinflation stopped. Therefore, in 1985, the year that stabilization began, taxes on petroleum represented no less than 64 percent of TGN revenue. We return to this point in chapter 5.

In regard to the composition of internal taxes (more precisely, taxes collected by the internal revenue service and excise taxes on petroleum products), the most important component during the normal years 1975–78 was taxes on consumption and sales. The share of personal income taxes in total internal taxes has never been above 25 percent. The contribution of corporate income taxes was likewise modest, never going beyond 23 percent of internal taxes.

Until the tax reform of 1986, property and road taxes were local taxes collected and earmarked for the municipalities and did not enter the TGN coffers. It is very hard to locate data of good quality for local governments, so only gross trends can be suggested. As happened with the TGN revenues, there was a slight improvement in tax effort during the 1970s, but in the 1980s, property taxes and vehicle taxes suffered very much with high inflation. Not only did lags in payments affect the real value of collections, but property assessments (which were undervalued to begin with) lagged far

behind inflation, so that real property values for tax purposes fell sharply during the high-inflation period. Some municipalities in dire financial straits asked for, and obtained, frequent direct transfers from the TGN. The financing problems of the regional development corporations, the universities, and the social security system were also acute during the high inflation period.

## 3.3 Management of Public Expenditures

The chronic weakness of public sector revenues and the low profitability of public investment spending explain a large part of the overall fiscal disaster in Bolivia in the 1980s. Also important were the dynamics of public sector spending on the current account of the budget (i.e., other than for capital expenditures). The key point here is that debt-servicing costs rose sharply in the 1980s just as the availability of new financing dried up. The government was squeezed by falling tax revenues (due to rising inflation), higher expenditure charges (due to rising interest payments), and an inability to finance the resulting gap (as well as the deficit levels inherited from the 1970s) through foreign borrowing. The result was a turn to the inflation tax.

Unfortunately, there is a profound difficulty in tracing interest payments carefully through the budget since the interest obligations were at various points charged to the state enterprises, the central administration, and the Central Bank. We will be able to review in chapter 5 some data on overall interest payments made to foreign creditors, but without precisely specifying how the spending was allocated among various parts of the public sector.

As in the preceding section, a detailed analysis of expenditures must focus mainly on the TGN because of a lack of information regarding other parts of the state sector. Precisely because of the shifting of various financial burdens among different parts of the state sector, a focus on the TGN is not only incomplete, but may sometimes even be misleading. TGN expenditures as a percentage of GDP were 9.6 percent on average in the decade of the sixties, 12.2 percent in the seventies, and 16.7 percent from 1981 to 1985. The evolution of overall expenditures was shown in table 3.3. The large increase in overall spending after 1981 is mostly accounted for by a rise in debt-service expenditures and in transfers to financially strapped state enterprises.

The composition of the TGN expenditures for selected years is shown in table 3.4. Note that in the 1970s, personnel expenses were generally about half of the total. In 1982, however, interest costs on the foreign and internal debt rose sharply, and payments to the Central Bank, also apparently related to foreign debt, accounted for about two-thirds of overall expenditures. In 1984, interest costs fell sharply as Bolivia suspended payments on the commercial bank debt.

Was the central government profligate between 1970 and 1985? A key indicator of profligacy is the increase in employment.<sup>6</sup> Employment in the

| (as pe                   |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|
|                          | 1970  | 1976  | 1980  | 1982  | 1984  |
| Personnel                | 54.1  | 42.4  | 46.4  | 20.8  | 59.7  |
| Materials                | 1.4   | 6.3   | 7.3   | 3.0   | 5.5   |
| Transfers                | 16.3  | 16.6  | 11.6  | 10.0  | 19.8  |
| Debt service             | 13.6  | 2.1   | 16.3  | 26.8  | 7.6   |
| Payments to Central Bank | .0    | .0    | .0    | 40.7  | .0    |
| Other                    | 14.6  | 22.7  | 18.4  | 4.1   | 7.6   |
| Total                    | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Table 3.4 Structure of Expenditures in the Central Government, 1970-84 (as percentage of total expenditure)

Sources: Data refer to central government (TGN) and are based on the data given in table 5.4 of Breuer (1988), which in turn were provided by UDAPE in the Ministry of Planning, Bolivia.

central administration increased by 92.4 percent between 1970 annd 1982, yielding an average annual rate of growth of 5.6 percent. This rate of growth was well above that of the urban population and of GDP, with the main increases occurring between 1970 and 1976. We know from the political analysis that succeeding administrations used patronage as a way to cement patron-client relations, and thereby build a political base of support. It does indeed seem that the result was a profligate and inefficient overextension of public sector employment.

Expenditures on investment that were on average around 2 percent of GDP during 1976-79 fell to around 0.3 percent during the crisis years of 1981-85. Since central government investment expenditure is mainly on social overhead, the impact of its substantial reduction has important repercussions on income distribution and on growth. The fall in this particular type of investment will have long-lasting effects, the magnitude of which has not yet been fully appreciated.

# 4 Trade Policies, 1970–85

It should be recalled from our overview in chapter 1 that the long-run growth of the Bolivian economy has been critically determined by the exports of primary commodities, mainly tin and natural gas. Bolivia's economy depends crucially on the performance of the export sector. In turn, shifts in indebtedness have coincided, procyclically, with the export cycle. Bolivia's dollar export earnings during 1970–88 are shown in table 4.1.

Export earnings and, by extension, the domestic economy have been greatly affected by the instability of Bolivia's export prices. As a result, policymakers have focused on measures to stabilize and improve Bolivia's