Report No. 6603-TU

Turkey: Adjusting Public Investment

(In Two Volumes) Volume I: Overview of Findings and Recommendations

March 30, 1987

Europe, Middle East and North Africa Projects Department

FOR OFFICIAL USE ONLY

Document of the World Bank

TURKEY

ADJUSTING PUBLIC INVESTMENT

VOLUME I

CURRENCY EQUIVALENTS

Currency Unit	=	Turkish Lira (TL)
US$1	=	TL 652
TL 1	=	US$ 0.0015

Currency equivalents are those effective April 1986, unless otherwise indicated.

ABBREVIATIONS

BOAT	-	Build-Operate-and-Turnover
IAF	-	Investment Acceleration Fund
MHF	-	Mass Housing Fund
PCF	-	Petroleum Consumption Fund
PPF	-	Public Participation Fund
SEE	-	State Economic Enterprize
SPO	-	State Planning Organization

TURKEY

ADJUSTING PUBLIC INVESTMENT

TABLE OF CONTENTS

VOLUME I — Page No.

OVERVIEW OF FINDINGS AND RECOMMENDATIONS

I. Scope of Report 1

II. Government Objectives in Structural Reform 1

III. Public Investment Strategy 2

IV. Public Investment Management 7

V. Summary of Action Program to Strengthen Public. . . . . Investment Management 14

VOLUME II

MAIN REPORT AND STATISTICAL ANNEX

CHAPTER I. Introduction 1

The Agenda 1

CHAPTER II. The Public Investment Framework: Adjusting the Visions and Goals 3

CHAPTER III. Public Sector Investment Management: Adjusting the Means 20

CHAPTER IV. Institutional Reform: Adjusting the System 30

CHAPTER V. Adjusting Public Investment: An Action Program . . . 43

ANNEXES: . . . . . .

This report is based on the findings of two main missions in February and November 1985 and on several sector studies carried out during 1985. The first mission comprised: Jayanta Roy (mission chief); Ian Johnson (deputy chief and energy); Branko Milanovic (macroeconomist); Ritu Anand (macroeconomist); Mahmud Tirmazi (irrigation); Robert Wildeman (housing/urban); Ajit Mozoomdar (public sector management); and William O'Neil (steel). The second mission comprised: Robert Liebenthal (mission chief); Friedrich Kahnert (deputy mission chief); Ritu Anand (macroeconomist); Shangzhi Wu (general economist); Ian Johnson (energy); Joelle Manibog-Chassard (coal and lignite); P. T. Venugopal (pipelines); Kariyawasam Wijetilleke (refineries); Roy Knighton (transport); Linda Likar (forestry); David Gardner (forestry); Silvie Tillier (agriculture); William O'Neil (steel); Robert Wildeman (urban); Lars Rasmusson (water supply); David Davies (tourism); and Ajit Mozoomdar (public sector management). In addition, sector working papers were prepared by Bruno Laporte (education), Louis Vassiliou (health) and a number of other staff members. The report was discussed with the Government by Robert Picciotto and Robert Liebenthal in June 1986 and again in November 1986 by Robert Liebenthal, Friedrich Kahnert and Sven Kjellstrom.

VOLUME I

TURKEY: ADJUSTING PUBLIC INVESTMENT

Overview of Findings and Recommendations

I. Scope of Report

1. The recent transformation of Turkey's economic policies from an inward-looking to an export-led strategy has far reaching implications for the economy and society. Greater decentralization of economic decision-making, greater accountability for effective use of resources through realistic, market-based pricing, greater confidence in the enterprise and innovation of private economic agents add up to a new concept of the role of the State. Accordingly, public investment and the institutions that manage it are being reoriented. However, the vision of a rapidly growing, competitive economy will only be realized if continuously translated into specific agendas of reform backed up by effective management of public resources. Hence, centralized planning must give way to strategic, indicative, flexible planning, combined with strict programming and budgeting of public resources. In this new context, the broad aim of this report is to help the government of Turkey design the needed restructuring of its public investment.

2. Two sets of issues involved in this restructuring are covered. The first concerns public investment strategy: its size, the sectoral priorities, the relationship with private investment, the impact of decentralization; in short, the policies underlying public investment. The second concerns public investment management, issues critical to the realization of the strategic shifts now underway. Within this framework, several topics are treated in some detail: the need to change the coverage of public investment analysis; managing the sources of financing for public investment; avoiding overprogramming; strengthening the data base; and better provision for operation and maintainance. Changes are recommended in the institutions and procedures for public investment planning, budgeting and policy formulation to facilitate the effective implementation of the economic reform agenda. Detailed recommendations on the design, implementation and assessment of the public investment program are contained in Volume II of the report. These recommendations are derived in part from an in-depth review of sectoral investment programs.

II. Government Objectives in Structural Reform

3. In response to the financial crisis of the late 1970s, the Government of Turkey embarked upon a reform program with two major strategic objectives:

(a) resume growth, following financial stabilization, by switching the orientation of the economy outward, that is, by adjusting it increasingly to international market signals;

(b) change the role of the public sector from leading economic growth to supporting private sector development from both domestic and foreign sources.

In addition to a major reorientation of macro-policies, the new economic strategy was implemented, starting in 1980, through measures to restrain the public sector's call on resources, to shift public investments and divest those state enterprises judged suitable for private involvement, and to improve the incentive framework for private sector activity. In particular, the Government has aimed at reducing the growth of public expenditures to avoid crowding out the private sector, and has given priority to infrastructure sectors (irrigation, energy, transport and communications) over manufacturing for public investment outlays.

4. The reforms were on the whole remarkably successful in improving the financial position of the country and in promoting structural adjustment. The process, however, is far from complete. A number of macroeconomic problems persist. In particular, private investment has been sluggish due to inflation and high real interest rates. Crowding out has remained an issue because public investment expenditure grew faster than expected in 1985-86. Many of the institutional and procedural changes needed to anchor and support the reform program have yet to be implemented. The decentralization of public sector resource management that has occurred since 1984, by increasing the resources of municipalities and the rapidly growing number of extra-budgetary funds, has increased the need for institutional and procedural changes by highlighting the importance of coordination and planning. Economic decision-making, especially investment planning and budgeting and their linkage with private sector promotion policy requires strengthening. The responsibilities of the State Planning Organization (SPO) should over the next few years shift increasingly towards strategic indicative planning, and the design of policies to promote agriculture, industry, trade, communications, human resource development, urbanization, and environmental protection. There is also a need to develop short-term forecasting to reinforce the ability to manage public sector cash flows throughout the year and speedily make necessary adjustments.

III. Public Investment Strategy

(a) Size of the Public Investment Program

5. Macro-economic performance improved in 1985 but was mixed in 1986. Growth in GNP is officially estimated to have reached 7.8 percent in real terms in 1986, which even if the final outcome is slightly lower, is nevertheless an exceptionally high rate of growth. The rapid growth was propelled by a sharp increase in domestic demand largely emanating from the public sector. With growth in demand outstripping the expansion in output, the balance of payments came under pressure. The current account deficit widened in 1986 and foreign borrowing rose. Public finances deteriorated, as the budget deficit widened. Recourse to domestic borrowing kept money supply

expanding at a rapid rate and prevented real interest from falling, although nominal rates declined. Inflation decelerated to the 25-30 percent range from 40-45 percent in 1985, but this favorable development was in part due to the unforeseen fall in oil prices and the dollar exchange rate (with respect to other major currencies). Medium-term economic prospects need to be evaluated carefully since developments in 1986 are not sustainable. The Government is adjusting its
economic policies for 1987 by slowing the growth in public expenditure to reduce the public sector deficit and bring the rate of inflation down to the 20-25 percent range. The GNP growth target is set at 5 percent in real terms. Slower expansion in domestic demand is expected to permit a significant reduction in the current deficit on the external side.

6. Non inflationary growth requires an acceleration of productive private investment. High interest rates are inhibiting such revival, and they are due in part to the funding requirements of the public sector. Public investment growth should therefore be restrained. A growth rate of about 4 percent annually through the remainder of the decade would be compatible with sustainable macro-balances, lowering of the inflation rate and revival of private investment. This should be the target until Government revenue is more buoyant, State Economic Enterprises (SEE) finances are under better control, and private investment is well launched in the key sectors. Concern arises, therefore, that the Government, while planning to reduce the rate of growth in public investment significantly from 1986 to 1987, is still aiming for a growth rate of 6.4 percent in 1987 (versus 10.2 percent in 1986 and 13.3 percent in 1985). Even the lower rate projected for 1987 is on the high side and might have to be revised downward during the course of the year.

(b) Composition of Public Investment

7. Sectoral imbalances in the investment program have emerged, partly because of recent changes in Government policy and partly because of persistent sectoral differences in the implementation of investment plans. First, further reductions in public power investments pose high risks. The current program is predicated on the success of the innovative Build-Operate-and-Turnover (BOAT) schemes for private involvement in power and mining and on a demand estimate that assumes the dampening effects of further real price increases at an early date. While they deserve to be promoted aggressively, the BOAT schemes may not materialize at the rate required to meet estimated demand. Also, demand may rise faster than expected if a lasting oil price reduction leads to accelerated growth. The long lead times required for power generation projects reinforce the case for a fail-safe arrangement for financing a least-cost generation program of fully prepared power generation projects large enough to prevent debilitating power shortages. Consequently a list of reserve projects, fully prepared and ready to be implemented, is required in the power sector as a fall-back position in case the BOAT schemes are delayed or fail to materialize.

8. Second, the level of resources allocated to transport and communications now appears high. Telecommunications investments have high priority since they are addressing a recognized deficiency in service and must meet rapidly expanding requirements of trade and industry. However, the willingness of customers to pay fully for the cost of the service is well

established. Therefore, the sector should make a positive contribution to public resources, and could well offer opportunities for effective SEE reform, or even for privatization. On the other hand, the transport investment program involves few projects which can be funded on a commercial footing by the private sector. As now designed, it contains projects of doubtful priority, particularly in its motorway and rural roads components. They should be pruned, and greater attention paid to effective operation, maintenance and improved transport enterprise management, especially in the railways. Selectivity is called for in motorway construction to avoid premature investments. If the private sector however is willing to finance, build and operate motorways without Government guarantees, it should be free to do so.

9. Despite Government intentions to increase the share of agriculture in public investment, it has actually declined since 1982. While institutional improvements in the sector are essential to increase absorptive capacity, there are high returns to the improvement of rural infrastructure and the accelerated completion of priority irrigation and drainage schemes. Hence, allocations to agriculture should increase, particularly from the budget.

10. The share of education and training should also rise. The sector has been starved of funds to the point where quality has deteriorated. An above-average rise in public investment is needed simply to maintain present standards for the growing school-age population. Increased resources will be needed to reduce the structural mismatch evidenced by shortages of skilled manpower that co-exist with high rates of largely unskilled unemployment, and to lay the basis for sustained growth in labor productivity. Some of these resources could come from larger private funding, but international experience suggests that the creation of a highly skilled labor force and an innovative private sector cannot take place without a major commitment of public resources and State leadership in the field of human resources development.

11. Long-term productivity growth also justifies increasing the share of public investments in health. Some parts of health delivery, in particular in preventive care, will not attract private interest, and much progress can be achieved by redeploying existing resources. But the health sector has suffered disproportionately from past expenditure constraints and now has significant needs in equipment procurement as well as in staffing.

12. Tourism also requires extra funding, but rather than providing interest subsidies which distort resource allocation, public investment should be concentrated on the enhancement of municipal infrastructure to support private investments in the sector (both foreign and domestic).

13. Public manufacturing and mining investments have generally lower priority and should be reduced further and faster than planned. In two of the three subsectors that have been responsible for the excess of overprogrammed investments in the past, iron and steel and petrochemicals, ongoing investment programs are nearing completion. Identified public manufacturing investments fall well short of targeted levels. Moreover, these identified programs

contain projects, primarily in textiles and engineering, that should remain suspended pending the results of privatization efforts. Some plants may require publicly-funded rehabilitation investment, if they are to be saleable at an attractive price. Others may not be saleable at all. Under the Government's policy, the preferred economic solution would be to close them. If the plants cannot be made viable, then this is what must be done, with specific arrangements to redeploy the affected workers. Under highly specific and circumscribed conditions, it may be rational to invest in cost-reduction and general efficiency improvements in some plants, but only after critical review.

(c) Stimulating More Private Involvement

14. The Government's objective of encouraging much larger private involvement in activities previously dominated by the public sector has given rise to a wide-ranging set of policies. They range from substantial investment incentives to the BOAT initiative, the intended divestiture of many State Economic Enterprises (SEE) and the removal of discrimination in favor of public enterprises in such areas as preferential credit, taxes and general operational subsidies.

15. Even the modified growth projections put forward in this report rely on a significant acceleration of private investment without which the vital recovery in exports, after the decline in 1986, would be jeopardized. It is of great concern that private investment is still not responding fully to the new policy environment, with the exception of construction under the impact of significant public support for housing through the Mass Housing Fund (MHF). Its estimated 13.0% overall growth in 1986 occurred predominantly in housing, with manufacturing investment growing by only 6%. This suggests that the privatization process should be accelerated, that means should be found to increase the impact of investment incentives and that real interest rates should be reduced.

16. The BOAT initiative is a promising model for mobilizing private involvement. However, it has been under discussion and negotiations for many months, at least in power generation, without any final agreement. The delays are probably inevitable given the novelty of the scheme and the time needed to develop a suitable environment for private sector involvement in power development. However, the delays could threaten power supply shortages in the medium and longer-term.

17. Stimulating private investments and larger private involvement in public investment is now critical for the eventual success of the Government's reform package. Action is needed along four lines:

- selected divestiture programs in textiles, cement, fertilizer, pulp and paper and engineering which have been adequately studied; gearing up future action programs for the privatization of other subsectors, including agro-industries;

- development of sector-specific strategies to determine the respective roles of public and private investment, increasing public-private interaction in energy, transport and the delivery of urban services;

- SPO sponsoring of long-term perspective policy studies, to guide these strategies. The capacity of SPO and of sector institutions to oversee such work will need strengthening; and

- more comprehensive attention to cost-recovery issues, particularly in fields where private involvement is in prospect. The higher the degree of cost recovery, the easier it will be to transfer activities to the private sector, whether by terminating public involvement, or by contracting with private enterprise for service delivery or management.

(d) Supporting the Transfer of Increased Resources and Responsibilities to the Municipalities

18. Automatic transfer of rising shares of tax revenues to the municipalities (along with transfer of increased responsibilities) reflects a welcome trend towards decentralization of economic decision-making and greater local accountability. Municipalities account for approximately 9% of total public investment in 1986, but their investment expenditures are projected to rise by 8.9% per annum over the rest of the plan period not counting other sources of finance for municipal investments, and without allowance for several large potential investments under consideration, but for which the source of finance is still to be identified. Municipal expenditures in general, and urban investments in particular, have been underfunded for many years with the result that large service deficiencies have accumulated. The need to catch up on these backlogs and to service an urban population growing at 4% per annum means that improvements in local resource generation (including better cost recovery) will remain critical for a long time.

19. Urban areas account for the bulk of economic activity in Turkey as elsewhere, and are employing a growing share of the labor force. This makes it important that urban areas provide adequate and efficient services to their population and their business sector. Increases in financial resources are necessary but not sufficient, because at least in non-metropolitan urban areas, these increases in resources and in municipal responsibility are way ahead of the needed improvement in management and general institutional capacity to use the resources and fulfill new tasks efficiently. It is, therefore, necessary to promote urgently the involvement of private agents in the delivery of selective urban services (solid waste, gas distribution, urban transport), as well as to put in place a support system for municipalities in such areas as finance, staff training, operation and management of municipal services, cost-recovery and resource-generation policies, municipal accounting, etc. In parallel, the functions of central agencies active in municipal investments have to be reviewed and adapted. Coordination between the central government, local authorities and the private sector must be

strengthened. The Government also needs more reliable information on regional development and municipal investments, especially in sectors of rapid growth. In some countries, such functions are entrusted to a ministry of local government. In others, regional planning bodies have been set up. In Turkey a regional planning system exists and could be developed further either as a complement to or substitute for enhanced devolution toward the municipalities.

IV. Public Investment Management

(a) Coverage of Public Investment Analysis

20. The coverage of the public investment program understates the total amount of public resources likely to flow into investments. It excludes companies owned in majority by the Government but operating under laws other than the one governing SEEs. The coverage also excludes public minority participations in business, but conversely includes the private portion of private minority participations in SEEs. Funds intended for investments through the Investment Acceleration Fund (IAF) are also not included ex-ante in the program, but are included in the data on realized public investment. Similarly, the public funds that are transferred to the MHF and onlent to individuals buying homes are recorded as private investment.

21. These practices understate the amount of public finance flowing into investment, especially in manufacturing and housing. It is, therefore, recommended that the official SPO investment program be accompanied by and analyzed together with a comprehensive list of such investment and investment-related expenditures.

22. Issues also arise from the growing practice of earmarking public revenues, especially taxes, for specific purposes and sheltering these resources from expenditure cuts as well as standard auditing procedures. Such earmarking is evident in the case of the extrabudgetary funds and the transfers to municipalities. Together, these earmarked transfers may now account for as much as one-third of government revenues. This weakens the use of the budget for macroeconomic management and resource allocation.

(b) Managing the Composition of Public Investment

23. Changes in the sectoral mix of public investment have generally been in the intended direction, but not at the planned pace and degree. Some sectors, such as manufacturing, power and transport, have quite regularly exceeded their investment targets. Others, such as agriculture, health and education have just as regularly spent less than they were allocated.

24. The absorptive capacity of implementing institutions does not generally account for these divergences. Instead, the following factors appear to be responsible:

(a) shortfalls of investment resources from the consolidated budget;

(b) relatively free access of SEEs to resources, especially external borrowing;

(c) the impact of extra-budgetary funds.

The "over-achieving" sectors are those using mostly foreign exchange, where SEEs account for an above-average share of total investments, where consolidated budget financing is less important, and where extra-budgetary funds have particular weight. The reverse is true of the "under-achieving" sectors.

25. Remedies lie in improved financial management of the program. First, efforts should continue to allocate adequate funds to priority projects, while low priority schemes are deleted or postponed. To help this, estimates of investable resources likely to be available from the consolidated budget should be conservative. More generous contingency provisions for priority projects would help protect their funding. Second, the SEEs' access to borrowing appears too easy and they appear to lack a strict dividend policy that would enable the shareholder (Government) to decide the disposition of earnings. Following the significant foreign borrowing by SEEs and municipalities in 1985-86, the Government decided to curtail sharply their foreign borrowing starting in mid-1986. More effective regulation of their foreign borrowing is needed, not only in order to manage the composition of investment effectively, but also to ensure that foreign borrowing does not overstrain the country's debt service capacity.

26. With appropriate policies, SEEs could increase Government revenue. SEEs account for more than half of total public investment, considerably more in a number of sectors. The Government's objective is that a first group of SEEs should be privatized, a second group should become fully viable enterprises operating in the same environment as private enterprises (enjoying considerable autonomy, with access to commercial funding while being held accountable to their shareholder for adequate profits), and a third group of unviable enterprises should be closed. The privatization and closure options should be pursued more aggressively. In addition, the Government should continue developing coherent policies adapted to the different categories within the varied groups. These would include enforcing appropriate cost-recovery principles for all utilities, setting standards for dividend payments, for debt/equity ratios and for borrowing limits, defining the accountability of Boards and Chief Executive Officers and their degree of autonomy. Short-term financial management is another critical area where improvements are needed. Cash-flows stemming from both investment and current operations have to be integrated and anticipated, with a capacity to identify early, and adjust speedily to unforeseen developments. In addition, a central capability for policy-making on Government/SEE relations and SEE performance monitoring is needed.

27. Extra-budgetary funds accounted for about 12% of public investment in 1986. Three extra-budgetary funds, the Public Participation Fund (PPF), the Mass Housing Fund (MHF), and the Petroleum Consumption Fund (PCF) are of particular importance in financing public investment. They are fed by earmarked taxes and other public resources and, in the case of the PPF, by revenue-sharing bonds issued to the public. A fourth fund, the Investment

Acceleration Fund (IAF), is a general budget line. The objectives of these funds are varied--to accelerate completion of priority projects (PPF, and, partly, IAF), to mitigate the effects of the structural reform package on real incomes (MHF) or to channel resources to projects of high priority (PCF). The IAF can also be used to meet physical contingencies, and to provide local resources for projects that attract foreign financing during the program period but were not part of the investment plan. It appears that not all the projects financed are of high priority. To this extent, the Government's ability to manage public expenditures in general and SPO's ability to manage public investments in particular are diluted and budget discipline is eroded.

28. The extra-budgetary funds have provided a quick solution to some problems, like under-funding of priority projects, at some risk to the effective management of public resources as a whole. Government should decide whether these funds are temporary expedients or permanent features of the financial system, in which case their financing, operations, audit and relations with Government and with other intermediaries need to be determined. A detailed program for improving the coordination and management of the funds is needed. There is some coordination at the summit but apparently not enough at lower levels.

(c) Avoiding Overprogramming

29. The most serious general problem in Turkey's public investment management arises in the implementation phase and is due to spreading available resources among too many projects--overprogramming. This problem had also been highlighted in the Bank's 1981 public investment review, but progress made has not gone nearly far enough and there may now be backsliding; for example, in the irrigation and transport sectors.

30. There are several causes. During the years leading up to the financial crisis of the late 1970s, SPO strongly encouraged the formulation of public investment projects. Despite the change in policy since 1980, agencies still propose new projects well in excess of available resources. In recent years, this has been coupled with target inflation rates that have been systematically lower than actual inflation, overstating the amount of real resources available for investment. Overprogramming also reflects shortcomings in project analysis, selection, financing and budgeting. Professional and technical analysis can clarify the costs of poor decisions -- and help to postpone them.

31. The Government has tried to tackle the problem by a combination of measures: a moratorium on new projects except for well-specified rehabilitation and modernization purposes; the priority ranking of the portfolio and consequent suspension or deletion of low-priority projects; priority for projects that are nearing completion; and the creation of funding devices such as the PPF and the IAF, designed to accelerate project completion rates.

32. These attempts met with only partial success. The moratorium was never really effective for "program-type" projects that consist of replicating

similar or identical operations. Some of these have multiplied rapidly, such as village electrification, rural road-building, low-dams projects, without the enforcement of adequate criteria to ensure productive use of public funds. Recently, the moratorium was extended to thermal power generation and lignite mining projects, but was prematurely relaxed in irrigation/flood control and motorway construction. Allocating full funding for projects to be completed within one year has not been fully effective, partly because there is no reliable data on how much it will cost to complete the projects, and partly because implementing agencies are in some cases able to reallocate funds between projects.

33. The Government's approach to the problem should be extended to:

(a) maintain and strengthen the "new project" moratorium;

(b) formulate core programs of more sharply defined priority projects in all sectors to be protected from resource shortfalls;

(c) integrate physical and financial programming and budgeting in a medium-term framework;

(d) provide adequately for price contingencies in the core programs;

(e) unify the revenue estimation, budgeting and expenditure control processes.

34. Stricter Project Selection. Improving the efficiency of public investments is a major strand in the Government's reform program. This implies that (a) the projects in the investment portfolio must be those that best promote the Government's economic and social objectives, (b) these projects must be implemented with the least cost in time and money, and (c) public assets must be operated and maintained efficiently.

35. The 1981 public investment review identified a significant number of projects of doubtful value in the portfolio. Many of these have since been suspended or eliminated. Sector analysis in this review has shown only a few such cases in the portfolio, but suggests several improvements in project selection, three of which deserve emphasis: (a) better consideration of possibly more appropriate or lower-cost alternatives of all types (investments versus better utilization of existing assets, alternative technologies, standards, locations, etc.), (b) more attention to project-specific linkage and phasing issues, and (c) greater weight of economic and financial criteria in project evaluation.

36. Strengthening the Moratorium on New Projects. The moratorium on new projects needs strengthening in several respects. First, it should apply to program-type repetitive projects as well as individual ones; ceilings on these program-type projects need to be imposed together with guidelines on minimum cost/benefit analysis and least-cost implementation standards and procedures. Second, projects in the "priority to be confirmed" category should only be admitted to the program if and when their priority is established and on

condition that the resources for timely completion are available. This must apply also to projects that are justified as "exceptions" under SPO criteria. Third, reactivation of a previously suspended project should require specific approval by the Higher Planning Council, to prevent the re-entry into the portfolio of uneconomic projects, such as is now happening with the Sivas steel mill. These criteria would include important projects needed to complete or realize full value from existing investments, like the proposed gas pipeline.

37. Wider Use of Sectoral Core Programs. Sectoral core programs have previously been accepted by the Government in the transport and irrigation sectors, and SPO has been ranking projects by priority in other sectors with generally acceptable criteria. More stringent application of the core program concept is, however, required and procedures must be found to give full-funding priority to the projects in the core program. This review proposes a number of sector-specific criteria for definition of core programs. But intra- and inter-sectoral linkage and scheduling requirements should also be part and parcel of core project selection. This review has identified a number of cases where project-specific linkage and phasing needs were not taken into account with clearly negative impacts on project benefits. Finally, core program identification will also raise interagency coordination problems in such sectors as agriculture, transport and health, and between central agencies and municipalities, which are rapidly increasing their involvement in sectors such as transport, water supply/sewerage, housing, tourism, health and manufacturing. A number of specific proposals to improve coordination are included in Volume II.

38. Integrating Physical Scheduling and Financial Planning. Close integration between physical and financial scheduling is needed to avoid across-the-board cuts in project funding which leads inevitably to similarly general delays in project completion. This integration can only be effective if the investment programming and budgeting period is extended beyond the present annual horizon, because most of the investment program consists of projects that require several years for implementation. These all have discrete optimal disbursement profiles, which should be respected as much as possible in the interest of efficient implementation. Three-year (or five-year) forward planning and budgeting makes it possible to anticipate bunching of financing requirements and take preventive action; it also provides the information necessary to decide on the start-up of new projects. Over the shorter term, there is a need to develop the capacity to make some adjustments in program execution during the current year as circumstances change. Occasional and limited reallocations for the current year should be possible, but would have to be promptly announced to all the concerned agencies to be effective. The existing quarterly review could be a useful starting point.

39. Price Contingencies in Core Programs. In the present inflationary environment in Turkey, the implementation of the core program should be protected from price escalation. The IAF could be used for this purpose. Price contingencies have been built into the 1987 public investment program, because an across-the-board inflation rate of 20% (the Government's target

rate) has been incorporated into all appropriations. Furthermore, where foreign exchange is involved, a TL/$ rate of 800 has consistently been applied (by comparison, the TL/$ rate was about 750 in December 1986).

40. Unifying Revenue Estimation, Budgeting and Expenditure Control. Finally, the present dispersal of revenue estimates (two departments involved), expenditure estimates (three departments) and post-budget expenditure control (two departments) creates problems of overlapping estimates and lack of coordination between investment budgets and provisions for operation and maintenance. It also makes it impossible to check how realistic expenditure estimates are. To make planning of revenues and expenditures more effective, it might be desirable to bring these functions under the purview of a single agency. If this were done, project budgeting and expenditure control could be done more effectively and scarce staff resources freed to improve project selection, appraisal and monitoring, to develop sector strategies and to promote private enterprise.

(d) Operation and Maintenance

41. Compared to the overprogramming issues affecting project implementation, operation and maintenance programs are not pervasive. Nevertheless, sub-standard maintenance is a recurring weakness of sectoral programs. Inadequate cost recovery is only one of its causes; it also occurs in sectors where inadequate funding is not an issue and in many revenue-earning activities. Nearly every sector has large backlogs in rehabilitation needs. More attention is needed to identify future expenditures required for the operation of investment projects, particularly if they are to be financed from the budget, to develop norms suitable for recurrent expenditure budgeting and to increase managerial incentives for effective performance of these important functions.

(e) Data Base for Management

42. Investment data now collected by SPO are often unreliable, analytically inappropriate and incomplete. Except for a limited number of large projects, SPO cannot gauge how much it will cost to complete multi-year projects, how implementation is physically progressing, what the time schedule of disbursements is likely to be, how implementing agencies expect to finance remaining expenditures and what the call on budgetary resources for the operation of completed projects will be. This type of information is indispensable for improving project completion rates and for forward planning and budgeting. Starting with the 1988 investment program, implementing agencies should be required to supply for every significant multi-year project:

(a) the degree of physical completion and the increase in completion percentage expected from the allocation requested;

(b) an up-to-date estimate of remaining costs to completion;

(c) an up-to-date disbursement profile year by year, showing foreign exchange and domestic currency expenditures separately;

(d) a detailed financing plan for the remaining costs until completion;

(e) future expenditures required for adequate operation and maintenance, particularly where they have to be financed from the budget, and the norms on which such estimates are based.

43. This system would also enable the Government, through the SPO, to monitor more comprehensively the efficiency with which the public investment program is implemented. SPO now monitors some 50 to 60 large projects, with 17 of the most crucial ones attracting particular attention. Wider monitoring was to be the job of the planning and coordination bureaus of sectoral agencies which, however, have not performed this function well. Until they are able to do so, such a data base would enable SPO to monitor progress on a much larger number of projects, and implementing institutions could be asked to account for any significant divergence between their plans and actual performance. Performance monitoring of this type, could eventually be built into a program-budgeting system.

V. Summary of Action Program to Strengthen Public Investment Review

Issues	Objectives and Strategy	Recent Developments and Measures	Measures Recommended: For 1987	Measures Recommended: Beyond
1. Size and composition of public investment need to be adjusted in line with macroeconomic constraints and sectoral growth objectives (despite major progress realized in these areas since 1980).	Streamline and reallocate public investment to support Government's objective of enhancing role of private sector and increasing reliance on market forces while persisting with the outward orientation.	Public investment increased in real terms by 13 and 10 percent respectively in 1985 and 1986, target for 1987 set at 6 percent, sectoral allocation broadly appropriate with the exception of premature motorway construction.	1) Aim for growth in public investment of 4 percent in 1987.	1) Retain public investment growth rate of 4 percent through 1990.
			2) Examine means to realize savings in non-investment public expenditure including costs of incentives.	2) Pursue measures recommended under 2) for 1987.
			3) Increase share of public investment allocated to agriculture, power and the social sectors.	3) Same as 3) for 1987.
			4) Reduce share of public investment allocated to transport, manufacturing and mining.	4) Same as 4) for 1987
Macro Issue			5) In preparing for the 1988 program, SPO should: a) develop core programs in all sectors through the elaboration of more stringent sector-specific criteria used to identify high-priority projects.	5) Ensure complete funding and implementation of core programs in all sectors.
			b) Review in detail on-going projects in irrigation, water supply, health and education against these more stringent selection criteria.	b) Adjust ongoing projects according to outcome of review applying more stringent selection criteria in sample sectors.

Summary of Action Program to Strengthen Public Investment Management

Issues	Objectives and Strategy	Recent Developments and Measures	Measures Recommended: For 1987	Measures Recommended: Beyond
2. Public Investment: Finance - Incomplete erratic, high cost and uncoordinated financing have hampered implementation of public investment and even biased project selection.	Reliable, comprehensive financing in a globally consistent framework is required through better programming, monitoring and readjustments.	From mid-1986 tighter reins on foreign borrowing by SEEs and municipalities while imposing across-the-board freeze of 8 percent of 1986 budget allocations regardless of project advancement or priority.	1) Treasury should determine and monitor aggregate external borrowing limits consistent with macro-economic constraints.	1) Practice of determining and monitoring aggregate external borrowing limits to be pursued.
			2) Only high-priority projects approved by SPO should be eligible for external financing; project implementation and expenditure phasing should explicitly take account of repayment profile.	2. Same as 2) for 1987.
			3) Process of preparing 1988 program, sector agencies should be required to prepare action programs for improving cost recovery in sectors, where this is a major issue.	3) SPO and Treasury should jointly ensure full funding of core programs in all sectors.
			4) By end-1987, the Government should decide how to rationalize the use of extra-budgetary funds within a framework of efficient overall public sector resource management.	

Summary of Action Program to Strengthen Public Investment Management

Issues	Objectives and Strategy	Recent Developments and Measures	Measures Recommended: For 1987	Measures Recommended: Beyond
3) Public Investment Management: Programming, budgeting, monitoring - short-comings in these areas have led to sub-optimal allocation of public investment and returns thereon.	Achieve maximum return on public investment within framework of optimal sectoral allocations complementary to the private sector.	Programming still predominantly within one-year perspective, although beginning to be extended beyond such a limited horizon in a few sectors; periodic monitoring during the year in process of being strengthened.	1) In early 1987, SPD should: a) elaborate a three-year rolling public investment program consistent with a financing plan derived from macroeconomic projections. b) elaborate list of investment related public expenditures and review public investment and recurrent expenditure requirement jointly. c) In order to program investments on a multi-year basis from 1988 onward, sector agencies will need to: - update expenditure profiles for proposed project (showing foreign exchange separately), while presenting alternative phasing possibilities. - make sure project plans and phasings have been coordinated within sectors. - indicate physical completion by year with financing plan until completion. - indicate prospective recurrent revenue requirements.	1) Continue with three-year rolling public investment programs combined with financing plan derived from macro framework, while examining jointly investment and recurrent expenditure requirements.

Summary of Action Program to Strengthen Public Investment Management

Issues	Objectives and Strategy	Recent Developments and Measures	Measures Recommended: For 1987	Measures Recommended: Beyond
			d) Strengthen the quarterly review of program implementation and make sure the mid-year reallocation of funds respects overall spending limits and safeguards the core programs.	
			2) Starting with the preparation of the 1988 program, SPO should establish price contingency funds (using the Investment Acceleration Fund for this purpose) to handle divergences between targeted and actual rates of inflation.	2) Continue with practice introduced under 2) for 1987.
			3) Make arrangements to ensure that multi-agency linkage and phasing issues are identified and reflected in project and program design.	3) Continue with practice introduced under 3) for 1987.
			4) Create a task force to study budgetary procedures.	4) Have task force submit recommendations within 18 months regarding: a) means to modernize budget procedures to ensure greater speed and flexibility in funding priority expenditures. b) reclassify the budget to achieve closer coordination between investment and recurrent expenditures. c) alternative arrangements for improving the coordination of budgetary functions.

Summary of Action Program to Strengthen Public Investment Management

Issues	Objectives and Strategy	Recent Developments and Measures	Measures Recommended: For 1987	Measures Recommended: Beyond
4. Strategic Planning - Absence of coherent development strategies in key sectors.	Achieve medium-term strategic planning that explores options and anticipates inter-sectoral linkage and phasing requirements.	Planning horizon gradually being extended beyond one year in key sectors like energy and transport.	1) SPO to begin strategic studies in cooperation with sector agencies according to a specific action program.	1) Complete (and periodically update) sector studies and issue the resulting guidelines for planning and project selection including guidelines for project evaluation.
			2) An action program should be devised for the strengthening of sector agencies to enable these to carry out budgeting and expenditure control functions currently handled by SPO.	2) Periodic consultations with the private sector to be maintained.
			3) Articulate long-term strategies in energy, irrigation, regional development and urbanization.	
			4) Carry out studies of petroleum supply options, future iron and steel production and forestry.	
			5) SPO to organize periodic consultations with the private sector to discuss:	
			a) public policy and investment programming;	
			b) Incentive policies and privatization issues.	

Summary of Action Program to Strengthen Public Investment Management

Issues	Objectives and Strategy	Recent Developments and Measures	Measures Recommended: For 1987	Measures Recommended: Beyond
5. Decentralization - Rapid decentralizaton of authority and resources to local bodies produced unsustainably large increase in expenditure and impaired coordination.	Strengthen the capacity of local bodies to deal with their new, wider tasks.	Restraint imposed on borrowing by municipalities, movement toward increased revenue sharing slowed down.	1) Government to establish a program to support decentralization by: a) strengthening the financial management of municipalities, including three-year investment programs. b) define resource generation policies. c) execution of local works should be assessed by the municipalities with support provided by central agencies. d) Iller Bank to be transformed from executing agency into financial institution supporting municipalities (to be done over 12-18 months). 2) A single ministry or agency should be created to carry out the program listed under 1) above; in the meantime capacity of SPO to act in the matters should be strengthened. 3) SPO to institute annual survey of investment by municipalities. 4) SPO should promote better coordination of investment programming by central agencies and municipalities other than the largest metropolitan areas.	1) Step-wise execution of decentralization support program.

Issues	Objectives and Strategy	Recent Developments and Measures	Measures Recommended: For 1987	Measures Recommended: Beyond
6. Management of SEEs - Despite improvements in the financial performance of SEEs, they still account for the predominant share of the unsustainably large overall public sector deficit.	Streamline SEEs to improve their performance while exploring privatization options whenever potentially feasible.	Government moving from study phase to execution phase regarding privatization, innovative BOAT scheme pursued.	1) Clarifying role of SPO's Coordination Department as oversight agency for SPOs. 2) Delegate authority to SEE Board of Directors to approve most investments. 3) In parallel with increased SEE autonomy, determination of maximum debt/equity ratios and foreign debt ceilings. 4) Profitable and financially sound SEEs should be required to distribute dividends. 5) Financial institutions to be given a larger role in appraising and supervising SEE investments and should be strengthened in their capacity to do so.	1) Implementation of new policies and regulations for SEEs adopted in 1987.