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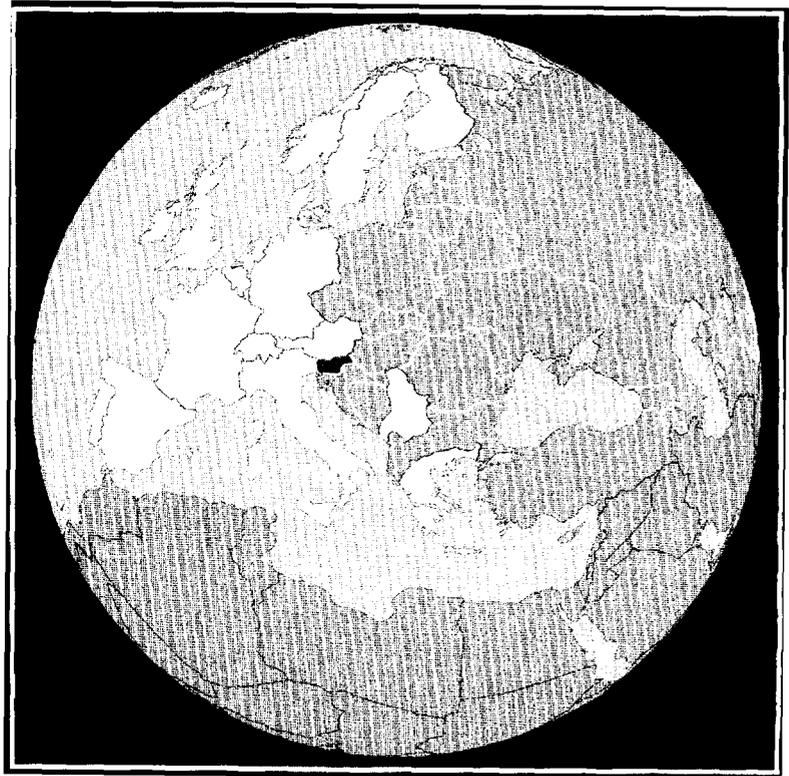
*Europe and Central Asia Poverty Reduction and Economic
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Communal Infrastructure in Slovenia

*Survey of Investment Needs and Policies
Aimed at Encouraging Private Sector
Participation*



Mojmir Mrak

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(List continues on the inside back cover)

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*Europe and Central Asia Poverty Reduction and Economic
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Communal Infrastructure in Slovenia

*Survey of Investment Needs and Policies
Aimed at Encouraging Private Sector
Participation*

Mojmir Mrak

*The World Bank
Washington, D.C.*

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Contents

Foreword	vi
Abstract	vii
Executive Summary	ix
1. Introduction	1
Background	1
Objective of the Study	2
Methodology Applied in the Study	2
Sources of Data	3
Structure of the Study	4
2. Environment for Communal Infrastructure Investment	5
Major Changes Affecting Post-Independence Communal Infrastructure Investment	5
Existing Legal and Institutional Environment for Communal Infrastructure Development	6
Financing of Local Communities	8
Price Setting for Public Services and Tariff Structures	9
Financial Performance of Command Service Enterprises	11
3. Communal Infrastructure Investment Needs and Funding Gap	17
Past Trends and Medium-Term Perspective on Communal Infrastructure Investment: Macro Perspective	17
Questionnaire Findings on Communal Infrastructure Investment: Micro Perspective	19
The Funding Gap	28
4. Policy Measures Conducive to Higher Level of Communal Infrastructure	32
Pricing of Communal Infrastructure Services	32
Competition, Including Restructuring of Service Providers and Private Sector Involvement	33
Legal and Regulatory Framework	33
5. Conclusions	35
The Current Situation in the Communal Sector	35

Communal Infrastructure Investment Needs and the Funding Gap	35
Policy Measures Conducive to Higher Levels of Communal Infrastructure Investment	36
Bibliography and Sources	59

Tables

Table 2.1.	Average Prices of Communal Services, 1991–1996 (Current Prices in Slovenian Tolars)	11
Table 2.2.	Relative Importance of the Surveyed Communal Sector Enterprises: Selected Indicators, 1997 (In Percent)	12
Table 2.3.	Structure of Assets and Liabilities Account of the Surveyed Communal Sector Enterprises, 1995–1997 (In Percent)	13
Table 2.4.	Structure of Revenues and Expenditures of Surveyed Communal Service Enterprises, 1995–1997 (In Percent)	14
Table 2.5.	Net Profit/Loss of the Surveyed Communal Sector Enterprises, 1995–1997 (In SIT Million)	15
Table 2.6.	Selected Performance Indicators for Surveyed Commercial Sector Enterprises, 1995–1997 (In Percent)	16
Table 3.1.	Annual Level of Communal Infrastructure Investment under “Mrak Investment Needs” Scenario, 1998–2002 (In SIT Billion, Constant Prices)	18
Table 3.2.	Annual Level of Communal Infrastructure Investment under “PHARE Investment Needs” Scenario, 1998–2002 (In ECU Million)	19
Table 3.3.	Cumulative Investment under the Three “Investment Needs” Scenarios, 1998–2002, (In SIT Billion; Constant Prices)	29
Table 3.4.	Cumulative Funding Gap, based on the Three “Investment Needs” Scenarios, 1998–2002	29

Annexes

Annex 1

Table A.1.1.	Asset and Liabilities Account of the Surveyed Communal Sector Enterprises, 1995–1997 (In SIT)	38
Table A.1.2.	Profit and Loss Account of the Surveyed Communal Sector Enterprises, 1995–1997 (In SIT)	39
Table A.1.3.	Performance Indicators for the Surveyed Commercial Sector Enterprises, 1995–1997	40

Annex 2

Table A.2.1.	Local Communities Covered in the Sample	41
Table A.2.2.	Volume and Structure of Investment, 1995–1997 (In SIT Million)	42
Table A.2.3.	Structure of Communal Infrastructure Investment, 1995–1997 (In SIT Million)	43

Table A.2.4.	Sources of Funds for Communal Infrastructure Investment, 1995–1997 (In SIT Million)	44
Table A.2.5.	Level of Communal Infrastructure Investment Plan Implementation, 1995–1997 (In Percent)	45
Table A.2.6.	Reasons for Poor Implementation of 1995–1997 Communal Infrastructure Investment Plan (From 1–not important to 5–very important)	46
Table A.2.7.	Volume and Structure of Communal Infrastructure Investment Plans, 1998–2002	47
Table A.2.8.	Annual Level of Communal Infrastructure Investment Plans, 1998–2002 ..	48
Table A.2.9.	Reasons for High 1998–2002 Communal Infrastructure Investment Plans (From 1–not important to 5–very important)	49
Table A.2.10.	Most Important Reasons for Possible Delays in the Implementation of 1998–2002 Communal Infrastructure Investment Plans	50
Table A.2.11.	Communal Infrastructure Investment Plans for 1998–2002: Sources of Funds	51
Table A.2.12.	Communal Infrastructure Investment Plans for 1998–2002: Which of the Financial Sources is Considered Least Reliable (From 1–not important to 5–very important)	52
Table A.2.13.	Communal Service Providers and their Expected Role in Financing 1998–2002 Communal Infrastructure Plans	53
Table A.2.14.	State Budget and its Expected Role in Financing 1998–2002 Communal Investment Plans	54
Table A.2.15.	Main Patterns of Credits to be Raised for Financing 1998–2002 Communal Investment Plans	55
Table A.2.16.	Importance of Individual Factors in Picking Up a Creditor for Communal Investment (From 1–not important to 5–very important)	56
Table A.2.17.	Which Creditor Would You Prefer at Equal Cost of Financing (From 1–least preferred to 5–most preferred)	57
Table A.2.18.	Private Investors and their Expected Role in Financing 1998–2002 Communal Investment Plans	58

Foreword

The Poverty Reduction and Economic Management Unit in the World Bank's Europe and Central Asia Region has been undertaking a series of analytical works on issues pertinent to the economies in the region. These issues include transition issues; issues of economic integration pertinent for the Central and Eastern Europe countries which are candidates for accession to the European Union; poverty issues; and other economic management issues. The analytical work has been conducted by staff of the unit, other World Bank staff, and specialists outside of the World Bank.

This technical paper series was launched to promote wider dissemination of this analytical work, with the objective of generating further discussion of the issues. The studies published in this series should therefore be viewed as work in progress.

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Pradeep Mitra
Director
Poverty Reduction and Economic Management Unit
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Abstract

This report was prepared by Professor Mojmir Mrak, Faculty of Economics, University of Ljubljana, and served as a background paper for the World Bank's Country Report *Slovenia Economic Transformation and EU Accession*.

The author thanks Bojan Radej for organization of the tables in Annex I as well as for his numerous comments and suggestions on other parts of the text. The preparation of the study was supported in part by the World Bank award to Harvard University.

Executive Summary

The annual amount of public investment in communal infrastructure in Slovenia was about 0.4 percent of GDP in the 1992–1996 period and was well below the infrastructure needs of the country. Any substantial increase in public funding of communal infrastructure in the near future is impossible given the austerity of the government's budget at the present time, and generation of additional financing through higher taxation and foreign borrowing are macroeconomically unsustainable. To support its policy of improving and expanding communal infrastructure essential to economic development, Slovenia therefore has no choice but to seek other sources of financing, specifically in the private sector.

Budgetary and financial considerations, while extremely important, are not the only arguments justifying increased private sector participation in both the provision of communal services and in the financing of communal infrastructure investments. Even more urgent is the need to provide the Slovenian economy and society in general with reliable and high quality infrastructure services. Furthermore, harmonization of Slovenian legislation with European Union (EU) environmental directives, and the actual implementation of these directives, requires from the country large investments in the areas of water supply, wastewater collection and treatment, and solid waste management

The Purpose of the Study

There is already a large consensus in Slovenia for involving the private sector in communal infrastructure financing. However, there is presently no global strategy for translating this consensus into practice. The purpose of this study is to contribute toward a better understanding of communal infrastructure investment issues in Slovenia, especially the main bottlenecks in this area, and to discuss policies aimed at increasing the volume of communal infrastructure investment. Within this general framework, this study has the following three specific objectives: (1) to give an overview of the existing institutional, legal, and regulatory environment for communal infra-

structure development, with a special focus on the financial performance of communal infrastructure service providers; (2) to provide a detailed analysis of communal infrastructure investment both for investments made over the last few years and those planned for the next medium-term period; and (3) to briefly discuss suggested policy measures for increasing the volume of communal infrastructure investment

The empirical backbone of this study is responses to a detailed questionnaire on communal infrastructure investment, filled out by a representative sample of local communities in Slovenia. The survey sample includes 26 local communities of different sizes and from all geographical regions of the country; the sample is roughly equivalent to a sixth of the total number of local communities in Slovenia. The total size of the population living in the survey sample local communities is 307,000, again roughly equivalent to a sixth of the country's total population. Another important source of statistical data for the study is financial statements for the 19 communal sector enterprises providing communal services in the 26 local communities covered in the survey sample.

The Environment for Communal Infrastructure Investment

In the post-independence period, the legal environment and the institutional framework under which Slovenian local communities and their respective communal sector enterprises operate has dramatically changed. Ownership of communal infrastructure has been transferred to local communities, which have also become responsible for investment in this area. Communal investments have further been affected by the fragmentation of local communities.

As far as financing of local communities is concerned, the state has retained strong control over their revenues. The state is not only the legislator, but it also determines the framework for financing debt and continues to control the prices of many communal services. There are four main sources of budget financing for local communities: (1) the local community's own revenues (which include taxes on assets, income from capital investments, and inheritance and gift taxes; (2) revenues shared between the state and local community (which include income tax and taxes on real estate trading); (3) borrowing (debt levels have to be kept within limits strictly determined by the central government); and (4) transfers from the state budget (which include so-called financial "equalization" and other transfers).

Since early 1992, prices of communal services have continuously been under government control and the existing tariff structure weighs more heavily on enterprises than on households. These two factors, accompanied by dramatic changes in the structure of communal service consumption, have strongly influenced financial performance of communal service providers. The financial health of enterprises in this segment of the economy is well below the financial performance for the economy in general. In addition the surveyed communal sector enterprises had a negative return on equity and dwindling profit margins in 1997, and the trend remains highly negative. Similarly negative trends have been observed in the sales realized by given assets. Finally, high

and growing assets-to-equity and debt-to-equity ratios confirm that the surveyed communal sector enterprises are undercapitalized and highly indebted.

Results of the Survey on Communal Infrastructure Investment

The survey has identified the following patterns of *communal infrastructure investment in Slovenia over the 1995–1997 period*: (1) communal infrastructure was, together with investment in roads, at the top of local communities' investment priorities; (2) more than half of total communal infrastructure investment was allocated for water supply and sewage. (3) over two-thirds of communal infrastructure investment was financed from state and local budgets, with the investment in the latter being significantly higher; (4) actual implementation of 1995–1997 communal infrastructure investment plans varied widely across individual local communities; and (5) where the communal infrastructure investment-to-implementation ratio was poor, financial problems are seen as the main reason.

As far as communal *infrastructure investment needs for the 1998–2002 period* are concerned, the following conclusions can be made on the basis of the survey: (1) communal infrastructure investments are planned to be on average 3 times higher than in recent years; (2) investment priority will shift from water supply to sewage, wastewater treatment, and solid waste management; (3) growing demand for communal services and adjustment to EU environmental directives are the main driving force behind ambitious communal infrastructure investment plans; and (4) lack of financial resources is claimed to be the single most important reason for possible delays in investment plan implementation.

The *structure of communal infrastructure financing* envisaged by the respondents to the 1998–2002 survey is dramatically different from the structure in place for 1995–1997 financing. The main changes are as follows. First, overall budget financing of communal infrastructure investments, that is, from both local and the state budgets, is planned to become relatively less important than in the past; its share is expected to fall from 68 percent in the 1995–1997 period to 53 percent in 1998–2002 period. Second, in contrast to recent years when local budgets had a dominant share of total budget financing of communal infrastructure investment, in the next medium-term period the state budget is expected to predominate as the source of budget funds. Third, the suggested shift in the structure of budget financing clearly reflects local communities' expectation that the state budget will be one of the main funding sources for meeting ambitious communal infrastructure investment plans. Taking into account the present fiscal condition of Slovenia, this view seems to be far from reality. Third, communal sector enterprises and the Eco Fund are expected to retain their shares (around 15 and 5 percent, respectively) in the overall funding structure of communal infrastructure investment. Fourth, in contrast to the past, bank credits are expected to become an important source of communal infrastructure funding. Their participation in the overall funding structure is expected reach 13 percent in the 1998–2002 period, while during

1995–1997 this source of financing was practically unused in the sample countries. Fifth, only one local community in the sample has explicitly put build, operate and transfer (BOT) type project financing as a funding source for its communal infrastructure investments.

The Funding Gap for Communal Infrastructure Investment

To improve living standards, improve environmental protection standards, and facilitate the country's accession to the European Union, Slovenia needs to invest between SIT189,5 and SIT223.5 billion in the development of its communal infrastructure over the period 1998–2002. This is equivalent to between 1.1 and 1.4 percent of the projected GDP of the country. However, macroeconomic projections realistically estimate public investment in this sector at not more than SIT69.4 billion, or 0.4 percent of GDP. Based on these projections, it is estimated that the public funding for communal infrastructure projects will fall short of actual needs by an amount equivalent to 0.7 to 1.0 percent of GDP, or between \$150 and \$200 million a year in nominal terms.

Policy Recommendations

In order to close or at least significantly reduce the funding gap between communal infrastructure investment needs and available public funds, Slovenia must design and implement a whole range of coordinated economic policy measures. They should all have a more commercial approach to communal infrastructure sector development. The commercialization of infrastructure services refers to all reforms that stimulate a business approach to these activities. Specific policy recommendations are listed below.

- *Price and tariff reforms.* A core element of the market-oriented transformation of public utilities in Slovenia is more careful pricing of services. Proper pricing, together with effective collection of tariffs, is crucial for both balancing supply and demand for communal infrastructure services, and achieving financial viability and accountability of infrastructure service providers. Proper pricing of communal services will encourage efficient use of services and provide the right incentives for private sector participation in both provision of services and communal infrastructure investment. Moreover, tariff reform involves both a general increase of prices and tariffs and internal transformation of tariff structures. This reform is aimed at reducing and eventually eliminating the policy of cross-subsidization, which weighs more heavily on enterprises than on households
- *Competition, including private sector involvement.* The introduction and promotion of competition wherever possible—including an increase in private sector provision of communal services and communal infrastructure investment—is a key element of policy reforms aimed at cost-effective provision of communal services. Competition also facilitates the task of regulatory bodies. Where competition cannot be introduced directly (that is, competition *with-*

in the market), and this is often the case with public utilities due to their monopolistic tendencies, it is often possible and desirable introduce competition indirectly (that is, competition *for the market*). In this case, firms compete for the right to provide services for a given period of time under a concession or lease contract.

- *The legal and regulatory framework.* Another important condition for improving the financial viability of communal infrastructure service providers is appropriate legislation that establishes a legal environment conducive for operational independence of enterprises. It is also necessary that the “rules of the game” apply to all participants, which means that state-owned enterprises are subject to the same discipline of commercial law and bankruptcy as any private sector enterprise. Infrastructure service providers must be properly supervised, particularly where monopolies or exclusive rights exist. An efficient regulatory framework, with clear-cut rules and regulatory bodies that are truly independent of the enterprises they regulate and of all political and administrative influence, is essential both to private investors (on which their willingness to invest depends on proper regulation), and for the protection of consumers.

1. Introduction

Background

Investment in communal infrastructure has not attracted much analytical interest in Slovenia over the last few years. However, there are presently at least four important reasons for a more systematic analysis of the subject.

1. *Large Investment Needs.* In the second half of 1997, an empirical study was conducted on the gap between Slovenia's infrastructure investment needs and the resources available for this purpose (Mrak 1997, p. 29). One of the study's main conclusions is that infrastructure investment needs in Slovenia amount to 8.7 percent of GDP for the 1997–2000 period. Of this total, investment needs equivalent to 1.8 percent of GDP were identified in the area of communal infrastructure, including investment in water supply, sewerage and wastewater treatment, and solid waste management. One of the recognized weaknesses of the 1997 study is the relatively poor quality of data for forecasting communal investment in the period 1997–2000. Due to the lack of financial and human resources, the study was accordingly prepared exclusively on the basis of aggregate data provided by the Slovenian Ministry of Environment and Physical Planning (MEPP).
2. *Strong Dependence of Communal Infrastructure Financing on Budgetary Resources.* In recent years, Slovenia has been financing its communal infrastructure by relying heavily on transfers from the state budget. Given the tightness of the state budget at the present time, any substantial increase of infrastructure financing from these sources is unlikely in the near future.
3. *Private Sector Participation.* Budgetary and financial considerations, while very important, are not the only issues justifying an increase in private sector participation, in both the provision of infrastructure services and the financing of infrastructure investments. Even more significant is the urgent need to provide the Slovenian economy and society in general with reliable and high-quality infrastructure services. There is already a considerable general consensus in Slovenia concerning the need for the private sector's stronger involvement in

the economic infrastructure sector. However, there is presently still no strategy to transform this general consensus into practice.

4. *Adjustment to the EU's Requirements.* The underfinanced communal infrastructure—a common pattern in transition economies—is not only a growing obstacle for the country's economic development and the general well-being of its population, but also a bottleneck in Slovenia's expeditious accession to the EU. Harmonization of the Slovenian legislation with the EU environmental directives, and their actual implementation, requires from the accession country large investments in water supply, wastewater collection, and the treatment and management of solid waste.

Objective of the Study

The general objective of the study is to improve understanding of communal infrastructure investment issues in Slovenia, identifying in particular the main bottlenecks in this area, and to discuss policies aimed at increasing the amount of communal infrastructure investment.

Within this general framework, the study has three more specific objectives: (1) to give an overview of the existing institutional, legal, and regulatory environment for communal infrastructure development with a special focus on the financial performance of communal infrastructure service providers; (2) to provide a detailed analysis of communal infrastructure investment for both investments made over the past few years and those planned for the next medium-term period and (3) to briefly discuss policy measures for increasing the amount of communal infrastructure investment.

Methodology Applied in the Study

The empirical part of the study focuses on quantifying the financial gap between communal infrastructure investment needs and the funds available for this purpose. Methodologically it is based on several infrastructure investment scenarios for the 1998–2002 period. The first set of scenarios, composed of three “Investment Needs” scenarios, reflects communal infrastructure investment needs, as defined in the investment plan documents of line ministries and infrastructure service providers and as provided, in the replies to the questionnaire sent to a representative sample of local communities in Slovenia.

In order to meaningfully assess the gap between Slovenia's communal infrastructure investment needs and its capacity for funding these investments, the “Investment Needs” scenarios are compared with a baseline scenario based on macroeconomic projections for the country's mid-term development. This baseline, the “Actual Level” scenario, is designed around the infrastructure investment levels for 1998–2002, as projected in the 1998 Spring Report published by the Institute of Macroeconomic Analysis and Development (IMAD).

Sources of Data

Questionnaire on Communal Infrastructure Investment

The empirical backbone of the study is a questionnaire on communal infrastructure investment designed in close cooperation with the MEPP, the Ministry of Finance (MoF) and Eco Fund. Representatives of local communities also contributed to preparation of the questionnaire; field visits were made to several local communities as part of the questionnaire pre-testing procedure.

The questionnaire is composed of three sections. In the first, respondents were asked to provide information about general characteristics of their local community and providers of communal services. The second section is aimed at obtaining information about the total amount of investment in the local community in the 1995–1997 period and especially about the structure and funding sources for communal infrastructure investment. In the last section, local community officials were asked to assess their communal infrastructure investment needs for the 1998–2002 period and provide information on projected sources of financing and expected problems in this area.

Local communities included in the survey sample were asked that the questionnaires be filled out jointly by representatives of local communities themselves and representatives of their respective communal service providers. The replies to the questionnaires were analyzed using standard statistical methods.

Time and financial considerations influenced the sample of local communities included in the survey. The sample of surveyed local communities has the following characteristics:

1. It includes 26 local communities, which is roughly equivalent to a sixth of the 147 local communities of Slovenia.
2. The total size of the population living in the sample local communities is 307,000, which is again roughly a sixth of the country's total population (1.98 million).
3. The sample local communities are equally distributed among small local communities with less than 5,000 inhabitants (8 in the sample), medium-size local communities with populations between 5,000 and 10,000 (10 in the sample), and large local communities with more than 15,000 inhabitants (8 in the sample) (see table A.1.1 in Annex II).
4. The sample includes local communities from all geographical regions of Slovenia.
5. Local communities with different legal forms of communal service providers are included in the sample.
6. The sample includes local communities that are recipients of "financial equalization" from the state budget and communities that do not have access to this form of financing.

Although the sample is considered to be sufficiently representative, the replies to the questionnaire may be biased in at least two ways: (1) information on communal infrastructure financing was given only from the point of view of local community officials and providers of communal services. The data therefore do not include the views of other groups interested in the process, such as consumers or bankers; (2) there was only a limited opportunity to cross-check the information

provided in the survey. For both reasons, the survey results should be considered as tentative and interpreted with caution.

Other Sources of Data

Another important source of statistical data for the study is the “Agency for Payments” database on 1995–1997 financial statements of Slovenian enterprises that includes data for communal sector enterprises. There are two financial statements for each enterprise in the database, an assets/liabilities account and a profit/loss account.

This study only analyzes financial statements for those 19 communal sector enterprises providing communal services in the 26 local communities covered in the survey sample (see above). It must be noted, however, that these enterprises’ business activities—they accounted for roughly 20 percent of total net sales of communal service providers in Slovenia in the 1995–1997 period—are not exclusively performed in the sample local communities. Some of these businesses also provide services to local communities not covered by the sample and this has to be taken into account in interpreting data on the performance of service providers covered in this study.

Many other sources of information and statistical data were also used in the preparation of the study. Some of them are the following:

1. Documents of line-ministries and infrastructure service providers regarding their investment plans;
2. Interviews with officials from line-ministries and local communities, as well as with representatives of infrastructure service providers, banks, specialized consulting firms, and research institutions;
3. Documents prepared by multilateral institutions (the International Finance Corporation, the World Bank, the Organization for Economic Cooperation and Development, and the Economic Commission for Europe); and
4. MoF documents on budget expenditures and IMAD documents and projections on the macroeconomic situation.

Structure of the Study

In addition to the introduction and conclusion, the paper consists of three main chapters. In the first, the current situation in the communal sector is discussed. The existing institutional, legal, and regulatory environment for communal infrastructure development is presented, but the analysis focuses on the financial performance of communal infrastructure service providers. The second chapter discusses communal infrastructure investment in detail. The analysis starts with an overview of 1995–1997 investment patterns, but the main concern is quantifying the 1998–2002 gap between communal infrastructure “investment needs” and financing available as foreseen in macroeconomic projections. In the third chapter, policy measures, including increasing private sector participation, required to create an environment conducive to higher communal infrastructure investment are briefly discussed.

2. Environment for Communal Infrastructure Investment

Major Changes Affecting Post-Independence Communal Infrastructure Investment

Before 1991, “socially-owned public enterprises were responsible for providing communal services, as well as for investing in communal infrastructure. In many respects, these enterprises had patterns similar to enterprises in any other segment of the Slovenian economy. Although prices of communal services were controlled by the state at that time, the sector had two stable sources for funding communal infrastructure investment—depreciation charges and transfers from a state fund established especially for this purpose (Kelvišar 1998, p. 69).

The post-1991 period has witnessed dramatic changes in the legal environment and institutional framework in which local communities and their respective communal sector enterprises operate. These changes can be classified into two main groups, both with unfavorable impacts on the level of communal infrastructure investment.

Changes in the Relationship between Local Communities and Communal Sector Enterprises

An important principle pursued by the legislator was to separate the management of enterprises providing communal services from the administration of local communities. Under the 1993 Law on Public Commercial Enterprises, ownership of communal infrastructure was transferred to local communities and they also became owners of the majority of other assets previously in the possession of communal sector enterprises. Through the 1993 law, as new owners of communal infrastructure, local communities have also taken over responsibility for investment required to maintain and upgrade communal infrastructure.

Although at the conceptual level the 1993 law clearly defines ownership rights of local communities regarding communal infrastructure, the related bylaws have not provided precise guide-

lines for the law's effective implementation. There are, for example, no clear accountancy instructions for communal infrastructure depreciation. As a consequence, depreciation has often not been properly included in the financial statements of the new owners of infrastructure—the local communities. In assessing problems associated with communal infrastructure in Slovenia, one source concluded that “most of local communities are not aware that the ownership means right and also duties. Some assets have “de facto” no owner; formally no transfer of ownership has been performed even if legally speaking such transfer was not necessary, since it operated ‘ipso jure’ (Poland and Hungary Assistance for Economic Restructuring Programme (PHARE) 1998, p. 97).

Changes in Local Communities' Legislation

Another problem negatively influencing investment in communal infrastructure in Slovenia over recent years is local community reform. As an integral part of this process, local communities were given new responsibilities, but the funding has not been increased to account for these new duties. Furthermore, under the 1993 Law on Local Self-Government, the large majority of local communities have been divided into two or more local communities. Since the resulting local communities are very often small in terms of their population (more than a third of local communities in Slovenia have a population below 5,000) and weak in terms of their economic base, many of them do not have sufficient financial resources to invest in communal infrastructure. The issue of infrastructure investment is further complicated by the fact that distribution of assets and liabilities of “old” local communities among the “new” ones has not yet been completed in all but a few cases. Communal sector enterprises and their performance have also been drastically affected by changes in local community legislation in Slovenia. In contrast to the pre-transition period, when each of these enterprises operated almost exclusively on the territory on their respective local communities, enterprises are now faced with the situation where they operate in more than one local community. Operating in more than one local community exposes communal sector enterprises to various problems, as they have to deal with more than one owner of communal infrastructure, and often with different legal regimes and tariff systems.

Existing Legal and Institutional Environment for Communal Infrastructure Development

In contrast to two other sectors of economic infrastructure, (the energy sector and the transport and communication sector), services related to water supply, wastewater treatment, and solid waste management are generally managed at the local community level. The core legal, regulatory, and institutional framework addressing the issue of communal services and communal service providers consists of the five following laws: the Environmental Protection Act (adopted in 1993), the Law on Public Commercial Services (adopted in 1993), the Law on Local Self-Government (adopted in 1993), the Law on Financing Municipalities (adopted in 1994), and the Law on Prices (adopted in 1991). Some of the provisions contained in this package of legislation are addressed in the paragraphs below.

Determination of “Public Commercial Services”

Although the Law on Public Commercial Services does not give a specific definition of “public commercial services,” it nevertheless provides guidance in this respect by describing them as services intended to provide products and services in the public interest. These services, to be provided by entities that are directly or indirectly controlled by the state or by local communities, can be either obligatory or optional. All obligatory “public commercial services” have to be defined by sectoral law.

For communal services, obligatory “public commercial services” are spelt out in the Environmental Protection Act. It defines the following obligatory “local public commercial services”: (1) the supply of drinking water; (2) disposal and purification of municipal waste and precipitation water; (3) handling of municipal waste; (4) dumping of the remains of municipal waste; (5) public hygiene and cleaning of public areas; and (6) maintenance of public ways and green areas as well as regular control and cleaning of heating places. Local communities have discretion to define certain other communal services as obligatory.

All “local public commercial services” have to be provided independently, directly, and compulsorily by the relevant local community. The only exception is where these services are provided by a wider local authority or by several local communities together. Provision of “local public commercial services” may be delegated to private entities at the local level, but in order to control the quality of services and the prices charged. The local community is responsible for supervision of service providers.

Ownership Transfer of Communal Sector Enterprises

Ownership transfer has been guided by the Law on Public Commercial Services and by a decree that established the criteria for determining the share of “socially-owned capital” in the overall capital of communal sector enterprises. Based on these legal provisions (affecting 76 communal sector enterprises), ownership of both communal infrastructure and “socially-owned capital” (all those assets used for carrying out services that are in the “special public interest”) was transferred into the hands of local communities. Once the process was completed, local communities became exclusive owners in 43 percent of all communal sector enterprises. They also acquired majority ownership shares in another 32 percent of enterprises and became minority equity holders in the remaining 25 percent of enterprises.

Legal Forms of Carrying Out Communal Services

According to the Law on Public Commercial Services and the Law on Local Self-Government, “commercial public services,” and therefore “local public commercial services,” can be provided by one of the five following legal forms (based on PHARE, 1998, 90–93):

1. *Administrative enterprise*. This is a unique entity without a legal identity that can be established within a state administration—for instance, within a ministry or as part of a local authority.

It is a nonprofit entity and usually established where other legal forms would prove to be inadequate and irrational.

2. *Public economic institution.* As an institution with its own legal identity, a public economic institution must be under the control of either the state or the local community. State or local communities should hold an ownership participation of at least 51 percent while other legal and natural persons may own up to 49 percent of the institution. The state or local administration must manage public economic institutions.
3. *Public enterprise.* Provisions for this legal form are spelt out in the Companies Act adopted in 1993. The act stipulates that, like with a public economic institution, a public enterprise has its own legal identity. The enterprise can be established either by the state or the local community with the aim of performing public commercial activities.
4. *Concession.* This legal form implies a contractual relationship between the state or local authorities and private owners. State or local authorities can authorize private entities to perform activities that satisfy public needs. Concessions may be issued both for the management of public services and for the exploitation of natural resources.
5. *Joint venture with public capital.* This legal form is also based on a contractual relationship. It involves a contractually determined transfer of public funds to a private owner who is obliged to use these funds to provide publicly needed goods or services. The crucial difference between a concession and a joint venture with public capital is that in the first case the private sector itself provides funding, while in the joint venture funding is provided by the public sector.

In practice, the most frequently applied legal form of providing communal services is public enterprises. At a time when there were 65 local communities in Slovenia, in around 80 percent of them communal services were provided through public enterprises, in another 13 percent through concessions, and in the remaining 7 percent of local communities through joint ventures with public capital. The other two legal forms had not been applied at that time (Svetovalni Center 1997, p. 29).

Financing of Local Communities

There are four main sources of budget financing for local communities:

1. *The local community's own revenues.* Local communities are entitled to raise their own revenues to finance public expenditure. The most important sources of revenue include taxes on assets (such as revenue from leases and rent for land and buildings owned by the local community), income from capital investments, and certain other income forms. Among other income forms are inheritance and gift taxes, and other taxes provided by law.
2. *Revenues shared between the state and local community.* Income tax and taxes on real estate trading provide income that is distributed among the state and the local communities.

3. *Borrowing.* Local communities are allowed to incur short-term debt to covering current expenditure, while long-term debts can only be incurred to finance infrastructure financing. Note, however, that debt levels have to be kept within limits strictly determined by the central government. This limit is currently set at 10 percent of a local community's budget revenues.
4. *Transfers from the state budget.* A brief overview of the above three funding sources for local communities reveals that the state has retained strong control over local revenues. The state is not only the legislator, but it also determines the framework for incurring debt for financing and continues to control the prices of many communal services. At present, local communities can obtain resources from the central budget through two major channels:
 - (a) *Financial "equalization."* According to the legislation, all local communities in Slovenia have to provide their populations with a similar level and quality of "public commercial services." When a local community does not have sufficient funding sources of its own to cover expenditure for these services (so-called "assured expenditures"), the state provides the difference in the form of so-called "financial equalization". In 1997, "assured expenditures" of local communities accounted for SIT92.6 billion. Of this total, their own revenues, including revenues shared with the state, amounted to SIT64.3 billion. Consequently, "financial equalization" was in that year was close to SIT30 billion (from internal documents of the MoF).
 - (b) *Other transfers.* These transfers are provided in several forms. These forms include transfers for demographically endangered regions, a water pollution tax (it can be retained in a local community if used for precisely determined investment purposes), and other special-purpose transfers. In volume terms, this channel of local community funding is much less important than "financial equalization."

Price Setting for Public Services and Tariff Structures

Until 1989, each municipality had a consumer-supplier council in which negotiations concerning the conditions of providing local public services took place. In principle, the consumer-supplier council set the prices for services but, in practice, the state had a great deal of formal and informal influence on price setting, endeavoring to keep public service prices down.

One of the first steps taken by the newly independent Slovenia in 1991 was to pass the Law on Prices. Under this law, the government is allowed to transfer by decree public service price-setting authority to a local community. The government is at the same time entitled to limit price increases for a particular product or service, but only when it is necessary to avoid or prevent disturbances or interruptions in the supply of goods, or to avoid or prevent monopolistic formation of prices. To limit prices, the government must issue a decree for a maximum period of four months; the decree can be prolonged every four months.

After passage of the Law on Prices, the government did in fact transfer authority for setting communal prices to local communities. This attempt to regulate prices at the local level, however, failed

within six months. Using the argument that local communities allowed high growth of communal service prices, the central government reassumed price-setting responsibility for communal infrastructure services.

Since early 1992, prices of communal services have continuously been under the control of the Ministry of Economic Relations and Development. Although various price adjustment procedures have been applied in recent years, their common feature has been to allow prices of public utility services to rise at 80 percent of general price inflation (as determined by the retail price index or industrial producer prices). This price-setting policy has not allowed communal service providers to cover all their operating and capital costs. In most cases, tariffs have only been sufficient to cover current expenditures, but not to finance regular maintenance and rehabilitation, not to mention new investment.

In order to improve their poor financial positions caused by strictly regulated prices, communal service providers have intensified their efforts to tap new funding sources. One of the most commonly used methods over recent years has been the introduction of local environmental fees aimed at tackling specific pollution concerns of the local population. The legal basis for introducing these fees is the Environmental Protection Act together with the statutes of local communities.

In addition to government control that sets the level of prices, there is another distinguishing feature of prices of communal services in Slovenia. As in many other transition economies, there are significant differences in the price levels for water supply, wastewater treatment, and waste disposal between different groups of customers. Different prices are usually set for the four following groups of customers: households, business entities, non-business entities, and other users. Table 2.1 shows that in recent years prices for communal services have been by far lowest for households and highest for business entities (however, only in the case of waste disposal, the highest prices have been paid by the category called "other users"). Table 2.1 also shows that the ranges of prices paid by different categories of users have narrowed over time.

Different prices for different groups of customers may sometimes be justified by differences in the costs of providing services. However, the policy of subsidizing households seems to be a more important explanation of why the existing structure of tariffs weighs more heavily on enterprises than on households. Although the existing tariff structures are a legacy from pre-transition times and reflect the role of communal infrastructure in allocating benefits to the population (cross-subsidization), they have not been substantially changed over recent years due strong public resistance to rebalancing the tariff structures.

There is no doubt that communal infrastructure services price and tariff increases will cause higher inflation, at least in the short term. This should, however, be judged against the effect of lower-priced services and the distorting consequences of these low prices on the economy as a whole. Not only do customers receive misleading signals as to the real value of communal infrastructure services, reducing that incentive for efficiency, but subsidization also results in the deferment of urgent investment in communal infrastructure.

The existing tariff structures accompanied by changes in the structure of communal services' consumption have strongly influenced the financial performance of service providers. In the water supply segment, for example, total water consumption remained at the same level between 1980

Table 2.1 Average Prices of Communal Services, 1991–1996

Current Prices in Slovenian Tolars

	June 1991	End 1991	End 1992	End 1993	End 1994	End 1995	Aug. 1996
Water supply*							
Households	10.22	15.51	28.05	35.28	45.43	51.80	56.80
Business entities	20.91	31.37	55.63	69.20	85.81	98.58	106.38
Non-business entities	15.94	24.28	40.15	49.89	64.94	84.31	92.32
Other users	15.97	22.54	42.30	55.39	75.64	88.12	98.96
Wastewater treatment*							
Households	3.07	4.44	7.77	9.84	12.97	16.87	18.03
Business entities	6.22	9.17	15.17	19.47	25.92	31.91	33.56
Non-business entities	4.95	7.62	11.71	14.55	17.59	26.85	28.01
Other users	4.99	7.06	14.10	15.98	23.24	36.45	40.96
Waste disposal**							
Households	1.18	1.78	3.13	4.09	4.94	6.08	7.08
Business entities	2.89	4.31	7.28	9.58	11.92	13.81	15.23
Non-business entities	1.82	2.97	5.08	6.84	7.71	10.09	11.03
Other users	3.30	4.50	7.18	8.67	13.76	16.57	17.61

* SIT/m³

** SIT/m²

Source: Strategy of the Communal Sector Development in the Republic of Slovenia. Svetovalni Center (1997), pp. 47–51 (in the Slovenian language).

and 1994. In the structure of consumption, however, the share of the enterprise sector was almost halved, from 62.5 percent to 35.9 percent. This reduction in enterprise share can be explained by the high increase in household sector consumption (increasing by more than 50 percent). However, it can also be explained by the decline of water consumption in the enterprise sector (in 1994, consumption was only 56 percent of that in 1980) due to drastic cutbacks in production (Svetovalni Center 1997, p. 48).

Financial Performance of Communal Service Enterprises

This sub-chapter, based on the Agency for Payments database, analyses 1995–1997 financial performance of those 19 communal sector enterprises (1,365 employees in 1997) that provide communal services for the 26 surveyed local communities covered in this study (hereafter called “surveyed communal service enterprises”—surveyed CSEs). Financial performance of these enterprises is compared, on the one hand, with the performance of all 78 communal sector enterprises in Slovenia (hereafter called “all communal service enterprises”—all CSEs; 6,224 employees in 1997) and, on the other hand, with the performance of the entire enterprise sector in the country (hereafter called “all enterprises;” 36,717 enterprises with 460,376 employees in 1997.).

Table 2.2 presents some general information about the size of the 19 surveyed CSEs in relation to all enterprises in Slovenia and in relation to all CSEs (78 communal sector companies).

Two main conclusions can be drawn on the basis of data presented in table 2.1. First, the surveyed CSEs represent a marginal fraction of the Slovenian economy. In all but one indicator, operating loss, these companies contributed below 0.5 percent in 1997. Operating loss, however, was almost 2 percent of total operating loss in Slovenia. Second, the surveyed CSEs are a representative sample of all CSEs, accounting for around one-fifth of total CSEs' employment, net sales, labor, and material costs and for between 10 to 15 percent of total CSE's assets, depreciation, and operating losses. The only two 1997 indicators where the surveyed CSEs differ significantly from the all CSEs are operating profit and equity. In 1997 the surveyed CSEs had practically no operating profit and a substantially lower equity base than CSEs in general.

Table 2.3 shows the assets and liabilities account of the surveyed CSEs. Their total assets and liabilities amounted to SIT27.1 billion at the end of 1997. A distinguishing feature of surveyed CSE's assets structure is an extremely high proportion of fixed assets. Fixed assets accounted for as much as 88 percent of surveyed CSE's total assets, while for all enterprises in Slovenia this share was much lower— (66 percent). An important reason for the high fixed assets to total assets ratio of surveyed CSEs and all CSEs lies in the fact that many of these companies still keep communal infrastructure in their financial statements. This has been the case because ownership over communal infrastructure has for various reasons (for example, incomplete procedures for allocation of assets of "old" local communities among new communities) not yet been transferred to respective local communities, as prescribed by the Law on Public Commercial Services.

On the liabilities side, there are also significant differences between the surveyed CSEs and other enterprises in Slovenia. They can be summarized in two main points:

Table 2.2 Relative Importance of the Surveyed Communal Sector Enterprises
Selected Indicators, 1997 (In Percent)

	<i>Surveyed CSEs*/ all enterprises</i>	<i>Surveyed CSEs*/ all CSE</i>	<i>All CSEs*/ all enterprises</i>
Assets and capital account			
Total assets	0.4	13.6	2.7
Fixed assets	0.5	13.2	3.7
Equity	0.1	5.4	2.1
Profit and loss account			
Net sales	0.4	19.8	0.7
Costs of goods, materials, services	0.1	20.5	0.5
Labor costs	0.3	20.9	1.5
Depreciation	0.4	14.8	0.2
Operating profit	0.0	0.1	0.5
Operating loss	1.9	12.6	1.6
Average number of employees (based on hours worked)			
	0.3	21.9	1.4

* CSEs = communal service enterprises
Source: Table A.1.1 and A.1.2 in Annex I.

Table 2.3 Structure of Assets and Liabilities Account of the Surveyed Communal Sector Enterprises, 1995–1997 (In Percent)

	<i>All enterprises</i>	<i>All CSEs*</i>	<i>Surveyed CSEs*</i>		
	1997	1997	1997	1996	1995
Total assets/liabilities (SIT billion)	7,381.0	199.4	27.1	22.0	17.3
Assets					
Fixed assets	66	90	88	87	87
Current assets	34	10	12	13	13
Liabilities					
Equity	52	40	16	20	27
Long-term provisions	3	6	2	2	3
Long-term liabilities	15	48	70	67	59
Short-term liabilities	29	6	10	10	10
Accruals and deferred payments	1	0	2	1	1

* CSEs = communal service enterprises.

Source: Calculated from table A.1.1 in Annex I.

1. *Low capitalization of the surveyed CSEs.* Due to legal provisions discussed above, a large proportion of surveyed CSEs was transferred into hands of local communities. As a result, surveyed CSEs and all CSEs are today in a disadvantageous position in relation to other enterprises with respect to the level of capitalization. Looking at the capitalization of surveyed CSEs from a dynamic perspective, it has deteriorated dramatically over the period 1995–1997. Equity as a proportion of total liabilities declined for these companies from 27 to 16 percent in this period.
2. *High indebtedness of the surveyed CSEs.* Long-term liabilities, consisting mainly of debts raised for infrastructure investment, accounted for almost 75 percent of surveyed CSEs' total liabilities at the end of 1997, while for economy as a whole this proportion was several times lower (only 15 percent). This difference can be explained by the above-mentioned low capitalization of the surveyed CSEs. Over the 1995–1997 period, these companies became even more dependent on long-term debt financing than they were before.

The main features of the profit and loss account of the surveyed CSEs are presented in table 2.4. On the revenues side, revenues from regular operation (sales of products and services) accounted for around 95 percent of the total while the other two sources, revenues from financing (interest) and extraordinary revenues (mainly transfers received from municipalities and central government) contributed the remaining 5 percent of total revenues.

The structure of expenditures among the two categories of enterprises contrast strongly with the revenues side, where structure is practically identical for both the surveyed CSEs and the Slovenian economy in general. The main differences are the following:

Table 2.4 Structure of Revenues and Expenditures of Surveyed Communal Service Enterprises, 1995–1997 (In Percent)

	All enterprises		Surveyed CSEs*		
	1997	All CSEs* 1997	1997	1996	1995
Total revenues (in SIT million)	6,526,446	47,543	9,101	8,467	6,897
Revenues from operation (Sales of goods and services)	93	94	95	96	96
Revenues from financing	4	3	2	2	2
Revenues from extraordinary revenues	3	3	3	2	2
Total expenditures (in SIT million)	6,508,589	47,856	9,105	8,370	6,789
Costs of operation; of which	93	96	98	97	97
Material costs	(70)	(45)	(48)	(50)	(47)
Labor costs	(15)	(31)	(34)	(32)	(34)
Depreciation	(5)	(17)	(13)	(13)	(13)
Other	(3)	(3)	(5)	(5)	(6)
Costs of financing	5	2	1	2	2
Extraordinary expenditures	2	2	1	1	1
Net overall profit (+)/loss (-) (in SIT million)	17,857	-313	-4	97	108

* CSEs = communal service enterprises.

Source: Calculated from table A.1.2 in Annex I.

1. For the surveyed CSEs, material costs represent close to one-half of total expenditures. In contrast to all enterprises where material costs accounted for 70 percent of total expenditures in 1997, in the surveyed CSEs, their share was 48 percent in the same year.
2. For the surveyed CSEs, labor costs are twice as important as for other all Slovenian enterprises. As service enterprises, the surveyed CSEs spend over 30 percent of their total expenditures for labor costs (mainly salaries), while for the economy as a whole this wages account for around 15 percent of expenditure. Average monthly salaries in the communal sector were SIT130.500 in 1997, which was just above the average for the economy as a whole (SIT128.900) (Agency for Payments data).
3. There was a high share of depreciation in the surveyed CSEs' expenditures. Although in the surveyed CSEs depreciation as a proportion of total expenditures was almost three times higher than in the economy as a whole (13 against 5 percent in 1997), these figures should be judged in relation to the asset structure of the two groups of companies. As mentioned above, fixed assets accounted for 88 percent of total assets of surveyed CSEs while for all enterprises in Slovenia this proportion was 66 percent.

The most important indicators of an enterprise's financial performance are profit (whether the enterprise generates more revenues than expenditures and therefore registers profit) and loss (the company's expenditures are above its revenues and therefore it runs a loss). For analytical rea-

sons, it is sensible to distinguish between different categories of financial results and consequently net profit/losses of different segments of enterprise performance. Table 2.5 shows the net profit/loss position of the surveyed CSEs.

1. *Net overall profit/loss.* Overall profit/loss incorporates net profit/loss from regular activity (point 2 in table 2.5) and net profit/loss from extraordinary revenues and expenditures (point 5 in table 2.5). The analytical value of the latter category is limited due to high amounts of net profit/loss from extraordinary revenues and expenses which are to a significant extent a consequence of two types of accounting operations: (1) high valuation of assets and gradual spending of accumulated provisions via extraordinary revenues; and (2) extraordinary expenses from write-offs (Simoneti, Rojec, and Rems 1998, p. 11). In contrast to all Slovenian enterprises that had net overall profit of SIT17.9 billion in 1997, the surveyed CSEs and all CSEs registered net overall loss in 1997 (SIT4 million and SIT314 million respectively).
2. *Net profit/loss from regular activity.* Profit/loss from regular activity includes net operating profit/loss (point 3 in table 2.5) and net profit/loss from financing (point 4 in table 2.5). There is a striking difference in this net profit/loss category between the surveyed CSEs and all CSEs on the one hand and all Slovenian enterprises on the other. Although both categories of enterprises registered net loss from regular activity in 1997, its origin was very different. In contrast to all Slovenian enterprises where the net loss was a combination of net operating profit (it reveals a real potential of a company for growth and development) and net loss from financing (it indicates that a company is too much burdened by the costs of financing), net loss from regular activity of surveyed and all CSEs was of completely different origin. It was a result of a net operating loss (this confirms the poor potential of these companies for growth and development) combined with a net profit from financing.

Table 2.5 Net Profit/Loss of the Surveyed Communal Sector Enterprises, 1995–1997
(In SIT Million)

	<i>All enterprises</i>	<i>All CSEs*</i>	<i>Surveyed CSEs*</i>		
	1997	1997	1997	1996	1995
1. Net overall profit (+)/loss (-)	17,859	-314	-4	97	104
2. Net profit (+)/loss (-) from regular activity	-51,584	-1,215	-167	5	72
3. Net operating profit (+)/loss (-)	50,516	-1,378	-286	-56	45
4. Net profit (+)/loss (-) from financing	-102,100	163	119	61	27
5. Net profit (+)/loss (-) from extraordinary revenues and expenditures	69443	901	163	92	32

* CSEs = communal service enterprises.

Source: Calculated from table A.1.2 in Annex 1.

3. *Net operating profit/loss.* As mentioned, operating profit/loss is the single most important net profit/loss category for measuring a company's potential for growth and development. In contrast to economy as a whole, which improved its financial performance over the recent years from a net loss of up to SIT2.5 billion a year in 1995 and 1996 to a net profit of SIT50.5 billion in 1997, the surveyed CSEs are taking just the opposite trend. In 1995, surveyed CSEs still had a net operating profit of SIT45 million, but it turned into a net loss of SIT56 million in 1996. Next year, net operating losses increased further to SIT286 million. This negative trend confirms that financial performance of CSEs has deteriorated over the recent years.

Table 2.6, which shows major performance indicators for the surveyed CSEs, sheds some additional light on the trends in financial performance of these enterprises and confirms the above findings. Measured by return (net operating profit/loss) on equity and sales, the surveyed CSEs performed much worse than all enterprises and comparison to all CSEs. Not only did the surveyed CSEs show a negative return on equity ratio and profit margin in 1997, but both indicators also have a strongly deteriorating trend over the last three years. A similarly negative trend has been registered in the total asset turnover ratio, where the surveyed CSEs reduced the amount of sales realized by given assets. High and growing assets-to-equity and debt-to-equity ratios confirm that this group of enterprises is undercapitalized and highly indebted. For 1997, both indicators are few times higher than the corresponding indicators for the whole enterprise sector in Slovenia.

Table 2.6 Selected Performance Indicators for Surveyed Commercial Sector Enterprises, 1995–1997 (In Percent)

	<i>All enterprises</i>	<i>All CSEs¹</i>	<i>Surveyed CSEs¹</i>		
	1997	1977	1997	1996	1995
Return on equity*	1.3	-1.7	-6.5	-1.3	1.0
Profit margin**	0.8	-0.3	-3.3	-0.7	0.7
Total asset turnover***	81	21	31	36	37
Asset to equity ratio	194	250	630	497	372
Long and short-term debt to equity ratio	85	134	501	380	253

1. CSEs = communal service enterprises.

* Net operating profit/loss per equity.

** Net operating profit/loss to net sales.

*** Net sales to assets ratio.

Source: Calculated from tables A.1.1 and A.1.2 in Annex 1.

3. Communal Infrastructure Investment Needs and Funding Gap

In this chapter, communal infrastructure investment in Slovenia is discussed from two perspectives: first, from a macro perspective that is based primarily on data provided at a national level by various ministries; and second, from a micro perspective that is based on replies to the questionnaire received from a sample of 26 local communities in Slovenia. Each of the first two sub-chapters below starts with an overview of 1995–1997 investment trends and continues with a presentation of communal infrastructure “investment needs” for the 1998–2002 period. The final sub-chapter focuses on the quantification of a “financial gap” between “investment needs” and funding availability.

Past Trends and Medium-Term Perspective on Communal Infrastructure Investment: Macro Perspective

Trends in the 1995–1997 Period

In contrast to transport and communications, which almost doubled investments in nominal terms, and the energy sector, where investments increased more than 50 percent between 1995 and 1997, investment in communal infrastructure nominally stagnated at the same period at around SIT12 billion. As a consequence, the sector deteriorated in its position compared with other infrastructure areas. Its investments as a proportion of GDP declined from 0.5 to 0.4 percent between 1994 and 1997 (IMAD 1998, p. 113).

Another contrasting feature of investments in the communal infrastructure sector is found in the structure of financing. In communal infrastructure, budget transfers represent by far the most prominent source of financing. In the period 1995–1997, budget resources supplied 66 percent of total communal sector investment in Slovenia (Ministry of Finance 1996 and Ministry of Finance 1998). This high proportion is not surprising taking into account that service providers, due to their weak financial situation, are practically without internal financial resources or good access to credit. Budgetary funding for investment in communal infrastructure is of two origins, from local communities' own financial sources and from the state budget.

“Investment Needs” in the 1998–2002 Period

In order to get a rough quantification of communal infrastructure investment needs in the 1998–2002 period (the “Investment Needs” scenario), two existing studies are being taken as a point of departure.

The first study was prepared by Mrak and analyzes Slovenia’s 1997–2000 investment needs for all sectors of the economic infrastructure, including the communal infrastructure (see Mrak 1997). By using the same MEPP source of data and also using the same methodology as that study (it assumes that investments will be implemented in equal annual portions throughout the whole 5-year period), the total volume of communal investment needs for the period 1998–2002 (in the further text the “Mrak Investment Needs” scenario) is estimated at SIT223.5 billion, or SIT44.7 billion a year (see table 3.1).

By far the largest part all investments is planned to go for wastewater collection and treatment projects. In practically all Slovenian cities, sewerage urgently requires rehabilitation, partly to catch up with investment needs deferred over the recent years; in some cases, an expansion of the network is also needed. It is projected that around SIT85 billion would have to be invested in this area over the next 5-year period while another SIT40 billion is planned for the construction of wastewater treatment plants.

In contrast to wastewater collection and treatment, which is under full responsibility of local communities, responsibility for solid waste management is shared between the central government and municipalities. For example, waste incinerator plants are the responsibility of the central government. According to government plans, two incinerators are to be built in Slovenia over the next 10 years, each at the cost of between DM200 and DM300 million. All other segments of solid waste management are dealt with at the municipality level. For the construction of new and reconstruction of existing landfills, local communities are expected to spend some SIT6 billion a year over the next 10 years. Of this, close to half would be used for some 10 landfills in the vicinity of larger cities, each of them at an estimated cost of between DM20 and DM30 million (Mrak 1997, p. 27).

Table 3.1 Annual Level of Communal Infrastructure Investment Under the “Mrak Investment Needs” Scenario, 1998–2002
In SIT Billion, Constant Prices

	1998	1999	2000	2001	2002
Total	44.7	44.7	44.7	44.7	44.7
Water supply	5.7	5.7	5.7	5.7	5.7
Waste water, of which	25.0	25.0	25.0	25.0	25.0
Sewerage	(17.0)	(17.0)	(17.0)	(17.0)	(17.0)
Waste water treatment plants	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)
Solid waste, of which	14.0	14.0	14.0	14.0	14.0
Incinerators	(5.0)	(5.0)	(5.0)	(5.0)	(5.0)
Landfills	(6.0)	(6.0)	(6.0)	(6.0)	(6.0)

Source: Own calculations on the basis of data from MEPP.

Another study on Slovenia's communal infrastructure investment needs is the PHARE study that assesses costs of the Slovenian environmental approximation to the EU. According to this study (covering the whole period between 1998 and the year 2020), investments associated with water quality and communal solid waste management (in the text below, the "PHARE Investment Needs" scenario) are estimated for the 1998–2002 period at around ECU1,024.5 million for the period 1998–2002 (see table 3.2). Again, the largest investment needs have been identified in solid waste management and wastewater collection and treatment

The Mrak and PHARE studies came to surprisingly similar conclusions regarding the communal investment needs of Slovenia in the period 1998–2002. Although the "Investment Needs" scenario presented in the PHARE study is some 16 percent below the estimates in the Mrak study, the difference can be explained by the fact that the PHARE document takes into account only projects that are required from the EU adjustment point of view. There are, however, other projects, especially in the water supply and wastewater and treatment areas, that are planned by Slovenian local communities (these projects are included in the study prepared by Mrak), but these projects are not required by the EU accession process (and are therefore not included in the PHARE study). Furthermore, according to the PHARE document, major investments in the solid waste management area were projected to start only in year 1999, and especially in 2000.

Questionnaire Findings on Communal Infrastructure Investment: Micro Perspective

This sub-section analyzes responses on that part of the questionnaire that was focused on communal infrastructure investment trends and patterns in Slovenia

Table 3.2 Annual Level of Communal Infrastructure Investment Under the Three "PHARE Investment Needs" Scenarios, 1998–2002 (In ECU Million)

	1998	1999	2000	2001	2002
Total	88.8	159.0	258.9	258.9	258.9
Water quality—compliance with EU legislation	23.5	29.5	29.5	29.5	29.5
Wastewater treatment plants and sewage—compliance with EU legislation	59.3	59.3	59.3	59.3	59.3
Solid waste, of which	6.0	70.2	170.1	170.1	170.1
Closing present landfills	(0.0)	(64.2)	(64.2)	(64.2)	(64.2)
Technical systems to recycle and reuse solid waste	(0.0)	(0.0)	(31.1)	(31.1)	(31.1)
Two incinerators	(0.0)	(0.0)	(68.8)	(68.8)	(68.8)
Landfills	(6.0)	(6.0)	(6.0)	(6.0)	(6.0)

Source: Development of a Costing Assessment for the Slovenian Environmental Approximation Strategy. PHARE, February 1998.

Main Conclusions on 1995–1997 Investment Trends

Together with investment in roads, communal infrastructure was at the top of local communities' investment priorities. Within the structure of total investment financing in local communities over the last three years, investments in communal infrastructure have been given a high priority. This is not surprising taking into account that investment in communal infrastructure is almost entirely under local communities' responsibility. For water supply, sewage, wastewater treatment, solid waste management, and other communal services (such as distance heating and gas supply), sample local communities have allocated 28 percent of their total investments, compared with 24 percent for road construction and modernization (see table A.2.2 in Annex II). What is, however, surprising is that in more than one-half of local communities investment in roads surpassed investment in communal infrastructure (in 12 out of 21 local communities in the sample for which data are available). In the medium-size local communities included in the sample, investments in roads were almost twice as high as investment in communal infrastructure. There are several explanations for why investments in roads have higher priority on the local community level than investment in communal infrastructure. First, investments in communal infrastructure often provide direct benefits only to a limited number of the local community's population. Second, benefits from communal infrastructure investment can often not be measured directly, especially in the short run. Third, investments in roads are more "visible" than investments in communal infrastructure and are therefore politically more attractive.

The total volume of communal infrastructure investment in the sample reflects the situation in Slovenia as a whole. Over the 1995–1997 period, total investment in communal infrastructure in the sample local communities amounted to an average annual of around SIT2 billion (see table A.2.3 in Annex II). Taking into account that the corresponding figure for the country as a whole is SIT11.7 billion (see IMAD 1998, p. 113), one can conclude that the sample results reflect the total volume of communal infrastructure in Slovenia. Communal infrastructure investments in the sample were roughly a sixth of total investment in communal infrastructure during 1995–1997.

More than half of communal infrastructure investment was allocated for water supply and sewage. In recent years, the bulk of communal infrastructure investment was allocated for water supply and sewage purposes. Water supply expenditures accounted for more than a third of the total, and investment in sewage accounted for another fifth of total investment (see table A.2.3 in Annex II). The remaining three communal services areas—wastewater treatment, solid waste management, and other (which includes distance heating and gas supply)—were much less investment intensive in the 1995–1997 period. Each area accounted for less than 15 percent of total communal infrastructure investment.

There are, however, some striking differences among the three local community subgroups covered in the sample with respect to the structure of communal infrastructure investment.

- The water supply is a much more important investment recipient for large and medium-size local communities (35 and even 45 percent of total investment, respectively) than for small local communities (11 percent). This might be explained by the fact that small local com-

munities meet more of their water demand from individually managed sources, which are not covered in the survey.

- Investment in sewage accounted for almost half of total communal infrastructure investments in medium-size local communities. High priority given to sewage projects by this group of local communities reflects growing demand for these services, as well as the fact that the sewage network is in poor condition (it needs extension and reconstruction) in many local communities.
- Investment in wastewater treatment, solid waste, and in distant heating and gas supply were concentrated in large local communities. This is common in other countries as well. What is surprising, however (though the situation varies), is that medium-size local communities have invested almost nothing in wastewater treatment and solid waste management. With one exception (the village of Radeče), similar conclusions are found for small local communities.

Over two-thirds of communal infrastructure investment is financed from budgetary sources. The survey confirmed the strong dependence of communal infrastructure investment on both local and state budgets. The most important sources of funds are local budgets. They accounted for over 50 percent of the overall financing of communal infrastructure in the sample local communities (one of which, Novo Mesto, is excluded from this part of the analysis, as it presents inconsistent data on this subject) (see table A.2.4 in Annex II). This figure is close to the MoF and IMAD data on communal infrastructure investment in Slovenia. According to these data, total communal infrastructure investment in the country amounted to SIT13.1 billion in 1997 (IMAD 1998, p. 113), of which SIT8.4 billion (Government Finance Accounts) or 64 percent was financed from local budgetary sources (the definition of communal services in these sources is broader than in the survey).

State budget contributions, either in the form of direct transfers or retained water pollution tax, were a less important budget source for communal infrastructure investment. The state budget nevertheless contributed another 18 percent of total funding for communal infrastructure investment. It is not surprising that this source of funding is much more important for smaller and typically less developed local communities (where the state budget share was close to 30 percent) than for other local communities in the sample.

Participation of communal services providers in the overall structure of infrastructure financing remained mostly below 15 percent mark (as mentioned above, Novo Mesto is an exception). This figure can be explained by the fact that service providers are typically not owners of the infrastructure and therefore do not have an incentive to invest. Besides, the relatively weak financial standing and poor investment capacity of service providers preclude their more active role in communal infrastructure investment.

Two other funding sources should be mentioned, each for different reasons. The Eco Fund, as a relatively new source, is gaining importance although its share in overall investment financing was still rather low—around 5 percent. Bank credits, along with other sources, contributed around 11 percent, confirming the poor access of investors to this source of financing.

The implementation of 1995–1997 communal infrastructure investment plans varies widely across individual local communities. The survey has shown that local communities performed very differently in terms of investment plan implementation. There are no grounds for a general conclusion that one sub-group of local communities was more successful in investment plan implementation than another (see table A.2.5 in Annex II). There are excellent performers among small local communities (Odranci, for example), medium-size local communities (Beltinci, for example), and large local communities (Murska Sobota, for example), and there are also weak performers in all the three groups. Investment plan implementation results are also rather similar across infrastructure sectors. In water supply, sewage, and wastewater treatment sectors, for example, investment plans were more than 75 percent complete in around half of all local communities that provided data on this question (22, 23, and 14 out of 26, respectively). However, around a fifth of the local communities in the case of sewage, and a third in the case of wastewater treatment, had implementation ratios below 25 percent.

Where the communal infrastructure investment implementation ratio was poor, financial problems were identified as the main reason. When local communities with relatively poor results in implementing 1995–1997 infrastructure investment plans were asked about the reasons for this unfavorable development (only those local communities with an implementation ratio below 75 percent in three or in all four communal services sectors were asked this question), their response has been almost unanimous. The respondents identified two financial reasons, the low prices of communal services and the debt-raising constraints of local communities, as the most important impediments for communal infrastructure financing in the past (see table A.2.6 in Annex II). High on the list of communal investment obstacles was also the fact that higher investment priority was given to other areas, especially to the road construction and modernization. It is interesting to note that some of the more “local” reasons, like overambitious investment plans and ill-prepared project documentation, were not considered by the respondents to contribute significantly to investment delays. This is hardly surprising, taking into account that respondents were local community officials; their bias with respect to specific questions in this area can not be discounted.

Investment Plans for the 1998–2002 Period

Over the next medium-term period (1998–2000), communal infrastructure investments are planned to be on average 3 times higher than achieved in recent years. Over the next medium term period, local communities plan to significantly increase the total level of their investment in communal infrastructure. In contrast to the period 1995–1997 when communal infrastructure investments were at an average annual level of SIT2 billion, the 1998–2000 investments are expected to increase to an average level of around SIT5.3 billion (see table A.2.7 in Annex II). Based on this figure, and assuming that the sample local communities cover about one-sixth of total local communities in Slovenia, we estimate the total communal infrastructure investment needs for the 1998–2002 period at a about SIT160 billion. This figure does not take into account some communal investments that go well beyond local communities’ responsibilities. One obvious exemption is waste incinerators (two units will be built by the year 2003). These additional projects will add another SIT40 billion (ECU 220 million) to total investment needs of the country, increas-

ing the total investment estimate to about SIT200 billion for the next five-year period (referred to below as the “Survey Investment Needs” scenario).

Medium-size local communities have far more ambitious communal infrastructure investment plans than the other two subgroups of local communities. Although all three subgroups of local communities plan a significant increase in their communal infrastructure investment in the 1998–2002 period, there is one astonishing difference among them. In contrast to small and large local communities that project to increase their average annual level of communal infrastructure investment by 150 percent and 100 percent respectively (measured against the average annual level of investment reached in the 1995–1997 period), medium-size local communities project an overall increase of more than 400 percent, from an average annual level of SIT330 million between 1995 and 1997 to SIT1,800 million between 1998 and 2002 (see tables A.2.3 and A.2.7 in Annex II). The reason for this drastic increase seems to be recognition that the deferment of investment into wastewater treatment and solid waste management in recent years has to be redressed with more investment in the future. Medium-size local communities allocated less than 3 percent of their total communal infrastructure investment over the 1995–1997 period in wastewater and solid waste; a corresponding figure for large communities was 33 percent.

Higher priority will be given to investment into sewage, wastewater treatment, and solid waste management. High growth of communal infrastructure investment over the next medium-term period will probably be accompanied by significant changes in the sectoral structure of these investments. Water supply projects, the top priority in the 1995–1997 period, are expected to lose ground against investments in the other three sectors, namely sewage, wastewater treatment, and solid waste management over the next five-year period. (see table A.2.7 in Annex II). All three sectors are expected to increase their share in the 1998–2002 communal investment pie; sewage from 24 to 28 percent, wastewater treatment from 15 to 21 percent, and solid waste management from 14 to 18 percent. The most striking development seems to be in wastewater treatment. While in the 1995–1997 period almost two-thirds of local communities included in the sample had no investment in this area, all local communities plan investment in wastewater treatment in the next five years.

Significant changes in the sectoral structure of communal investment can be observed for each of the three subgroups of local communities, if the 1995–1997 and 1998–2002 periods are compared.

- In small local communities, a significantly larger proportion of investment is planned for water supply projects (26 percent compared with 11 percent in the 1995–1997 period). This increase seems to indicate a much more normal share of water supply investments. In the 1995–1997 period, water supply investment was strongly depressed by two large sewage and wastewater treatment investments.
- Medium-size local communities have taken a completely new approach toward wastewater treatment and solid waste management, and therefore plan drastic increases of investments in these two sectors.
- In contrast to the 1995–1997 period when water supply projects had absolute priority (they accounted for 35 percent of total investment), in the 1998–2002 period investments in large

local communities are planned to be practically equally distributed among the four communal service sectors, each receiving around 20 percent of total investment. This change in the structure of investments seems to indicate two things. First, water supply needs are satisfied to a much larger extent than needs in other communal sectors. Second, local communities expect an improved economic environment that will create favorable conditions for larger investments. Available data on individual communal infrastructure projects to be implemented in Slovenia in the 1998–2002 period (a sample of over 700 projects) indicate that projects in wastewater treatment and solid waste management are on average several times larger than water supply projects.

The suggested dynamics of communal infrastructure investment raises some doubts. The survey shows that the total volume of communal infrastructure investment for 1998 is planned at a level of SIT3 billion, close to level achieved in the previous year. In 1999, however, investment is planned to double to SIT6.1 billion, and investments are expected to remain close to this level till the year 2002 (see table A.2.8 in Annex II). What are the reasons for the increase, and why are local communities planning their investment this way? One explanation is the following. For the year 1998, investment plans were made on the basis of hard facts, including existing limitations, while plans for the following years are based on expected adjustments in the macroeconomic environment. This environment is expected to provide far better conditions for communal infrastructure financing.

Growing demand for communal services and adjustment to the EU norms are the driving forces behind communal infrastructure investment plans. When asked to grade the importance of individual reasons driving local communities toward ambitious communal infrastructure investment plans, respondents grouped reasons for investment into three priorities. In all the three subgroups of local communities, top priority was given to the same two reasons, namely the growing demand for services and adjustment to EU norms (see table A.2.9 in Annex II). Better access to financial sources and deferment of investment in the past are two more explanations for the expected increase of communal infrastructure investment in the 1998–2002 period; these reasons have slightly lower priority. The lowest priority is assigned to several other reasons, two of which deserve special mention. First, respondents consider expected private sector participation in providing communal services and in financing communal infrastructure as a reason of low or practically no importance. This clearly indicates that local officials do not see the role the private sector might play in financing communal infrastructure projects in their respective local communities over the next few years. Second, respondents do not consider improvements with respect to project documentation as being of any importance for intensified investment activity in the future. Although this statement might be understood from the respondents' point of view, some incomplete data, as well as other replies to the questionnaire, indicate that inadequately prepared project documentation is often an important reason for delayed infrastructure investments.

Lack of financial resources is viewed as the most important reason for possible delays in investment plan implementation. Respondents were unanimous in their assessment that lack of financial resources is the major threat to the full implementation of the 1998–2002 investment plan. When asked to enumerate three most important reasons (not by priority) that might delay

investment plan implementation, all the 25 respondents that responded to this question put “lack of financing” at the top (see table A.2.10 in Annex II). Other reasons that were more frequently mentioned include the following: project documentation not ready (10 times), ownership problems (9 times), and inadequate relationship between the state and local community (6 times).

More funding for communal infrastructure investment is expected from the state budget and commercial banks, and less from local community budgets. The structure of communal infrastructure financing as envisaged by the respondents for the 1998–2002 period is dramatically different from 1995–1997. What are the changes and to what is this new funding structure attributed?

Budget Financing

Overall budget financing of communal infrastructure investments, including funding from both local and the state budgets, is planned to be reduced in importance compared with other funding sources, mainly against credits (see table A.2.11 in Annex II). In contrast to the 1995–1997 period when these sources contributed 68 percent of total funding, for the next five-year period their share is expected to shrink to 53 percent. This might reflect a realistic assessment that budgets will not increase at the same rate as communal infrastructure investments are planned to grow, and that consequently budget financing will not be able to keep its high share in the funding structure for this segment of investment.

What is, however, more difficult to understand is how respondents to the questionnaire explain the drastic shift in the structure of budgetary financing they are suggesting. In contrast to recent years when local budgets had a dominant share of total budget financing of communal infrastructure investment (in 1995–1997 period, they contributed as much as 50 percent and the state budget only 18 percent), for the next medium-term period the state budget’s participation is expected to take the leading position as budget contributor. Its share in total communal infrastructure investment is expected to increase to 27 percent while at the same time contribution of local budgets is expected to decline to not more than 26 percent. This projected shift in the structure of budget financing clearly indicates local communities’ expectation that the state budget will be one of the main funding sources available for meeting ambitious communal infrastructure investment plans. Taking into account the existing fiscal position of the country, this view seems to be unrealistic.

Local community officials have provided a very different view of the state budget’s role in communal infrastructure financing over the next five-year period. They expect substantially more money from the state budget than in the past. This has been confirmed both implicitly through the question on the projected funding structure for communal infrastructure investment (see above) and explicitly through a question on what officials expect from the state budget. All but one local community responded that they do plan to receive transfers from the state budget for communal infrastructure. Out of 25 local communities, 19 expect these transfers to be over 20 percent higher than in the past and another 4 percent are aiming at transfers up to 20 percent higher than in the 1995–1997 period (see table A.2.14 in Annex II).

However, local community officials seem to be well aware of the state budget problems and therefore of risks associated with projected transfers from the state budget. This conclusion is drawn from replies on the question about which financial sources of the 1998–2002 communal infrastructure investment funding plan are considered least reliable. More than three-quarters of

respondents mentioned transfers from the state budget in whatever form (direct transfers, financial equalization, or transfers for demographically endangered regions) (see table A.2.12 in Annex II).

Communal Service Providers

In the next five-year period, communal service providers are expected to only marginally increase their share in the overall structure of communal infrastructure financing, from 13 percent in the 1995–1997 period to 15 percent in 1998–2002 period (see tables A.2.4 and A.2.11 in Annex II).

This continued trend of low service providers' financial participation to a certain extent contradicts the response to the question about whether service providers are expected to increase their share in the overall funding structure of communal infrastructure investment. Almost two-thirds of local communities covered in the sample (15 out of 24) gave a positive answer to this question, including all but one of the large local communities and all but two medium-size local communities. In contrast, small local communities are mostly of the opinion that service providers will not assume a more prominent role in the overall structure of communal infrastructure financing (see table A.2.13 in Annex II).

Local communities that expect service providers to become significantly more important as a funding source for communal infrastructure financing were asked (1) to identify policy changes required to improve financial viability of service providers, and (2) to assess the relative importance of each change. Changes are scaled from 1—not important to 5—very important. Expected price liberalization is considered the single most important factor for improving the financial status of service providers (average grade 4.5), followed by expected improvement in operational efficiency of service providers (average grade 3.9) and expected increase in the volume of services (average grade 3.1) (see table A.2.13 in Annex II). It is interesting to note that in contrast, all sizes of local communities expect price liberalization and do not see much room for improving the financial viability of their service providers through increased volume of services or more efficient operation.

Eco Fund

Although its share in total communal infrastructure financing is not expected to increase from 5 percent over the 1998–2002 period, Eco Fund has been continuously strengthening its role in financing communal infrastructure investment. This applies both to its role as provider of financial resources and as project adviser and developer. In the 1995–1997 period, Eco Fund contributed to the financing of communal infrastructure projects in less than half of the local communities covered in the sample. In the next five years, this proportion is expected to increase to over two thirds. Eco Fund was also put at the top of the list when local communities were asked which financial institutions they would prefer to work with, assuming they would all provide financing at equal cost (see table A.2.17 in Annex II).

Bank Credits

In contrast to the past, bank credits are expected to become an important source of communal infrastructure funding. Bank participation in the overall funding structure is expected to reach

13 percent level in the 1998–2002 period, while in the 1995–1997 this source of financing was practically not used at all in the sample countries (see tables A.2.4 and A.2.11 in Annex II). This projection is at least implicitly based on the following two assumptions: (1) the existing limit on local communities' borrowing will be either eliminated or at least substantially relaxed; and (2) following gradual liberalization of prices, communal service providers are expected to improve their financial viability.

In the answers to questions on debt financing, the following common features can be observed.

- Local communities show high preference for long- and medium-term credit over short-term loans (85 to 15 percent), and also for loans with fixed interest rates over loans with variable interest rates (90 to 10 percent) (see table A.2.15 in Annex II). This can be explained by the very nature of infrastructure investments. For local communities, especially for smaller ones with relatively poor creditworthiness status, raising long-term credit continues to be an obstacle for communal infrastructure investment.
- All but two local communities in the sample—more than 90 percent—prefer local currency-denominated credits over credit in foreign currency (see table A.2.15 in Annex II). There is one crucial reason for this preference. Loans raised in SIT eliminate the foreign exchange risk, as revenues from communal services are exclusively in domestic currency.
- When asked about the importance of different factors for choosing a creditor, interest rates and the creditor's reliability are considered the most important factors by the all three groups of local communities (see table A.2.16 in Annex II). On the scale between 1—not important to 5—very important, these factors were assigned the highest average grades (interest rates 4.8 and reliability of creditor 4.5 percent). With a significant gap, other factors follow in the following order: creditor's efficiency (average grade 4.1), accessibility of a creditor (average grade 4.0), type of financial instruments a creditor offers (average grade 4.0), and other services offered by a creditor (average grade 3.8).
- In order to identify their attitude toward different groups of creditors, local communities were asked which creditor they would prefer to cooperate with if all of them provided credit at equal cost. On a scale of 1—least preferred to 5—most preferred, by far the highest rating was, as mentioned above, assigned to the Eco Fund (average grade 4.5). Taking into account the explicit condition stated in the question, that all creditor provide resources at equal cost, it is not clear why local communities prefer cooperation with this institution. One explanation might be Eco Fund's specialization and therefore its better understanding of environmental problems associated with practically all communal infrastructure projects. The next most preferred creditors are domestic commercial banks (average grade 3.9), followed by international financial institutions (average grade 3.0), foreign commercial banks in Slovenia (average grade 2.6), and foreign commercial banks with headquarters abroad (average grade 1.3). This order clearly indicates a strong preference for local community cooperation with domestic financial institutions and at the same time local communities' reluctance to work with foreign financial institutions, especially foreign commercial banks.

Private investors

There is only one local community (Murska Sobota) that has explicitly mentioned concessions as a funding source for its communal infrastructure investments (see table A.2.11 in Annex II). Although this indicates that for the time being private investors are not considered by local communities as a serious alternative for communal infrastructure financing, this conclusion should be weighed against another showing a growing general interest for this form of financing. When answering a specific question about their interest in private sector participation on communal infrastructure investment, more than three-quarters of surveyed local communities (16 out of 26) gave a positive answer. The main reasons for their interest are given as lack of traditional funding sources (16 out of 26) and expected better quality of services (see table A.2.18 in Annex II).

There are several obstacles that can explain the gap between the generally positive attitude of local communities toward this form of financing and the lack of actual projects being financed this way. In the 26 surveyed local communities, the most frequently stated obstacles for more intense private sector participation are the following: ownership problems (22 times), inadequate legislation (18 times), poor understanding of the concept (14 times), and lack of business interest (11 times) (see table A.2.18 in Annex II). This list clearly indicates that there is a lot to be done in order to create a friendlier environment for this form of financing.

It is of utmost importance that ownership problems between local communities and service providers, as well as between different local communities, are resolved without further delays. It is equally important to introduce legislation that will provide clear rules of the game for concessions and other forms of private sector participation in the communal infrastructure area. Another significant changes are needed in the macroeconomic environment, including changes in the price-setting mechanism and better competition rules. Finally, there is obviously a need for intensified education of local community officials and service providers on main features of this form of infrastructure financing.

The Funding Gap

In order to get a meaningful quantification of the gap between Slovenia's communal infrastructure investment needs and available financial resources for these purposes, the "Investment Needs" scenario (see above) must match the "Actual Level" scenario (which reflects the country's macroeconomic limitations). According to the "Actual Level" scenario, Slovenia will continue to invest the same proportion of GDP in communal infrastructure—0.4 percent—over the 1998–2002 period as in the period 1995–1997.

Table 3.3 presents the projected communal infrastructure investment under all four scenarios. According to the three "Investment Needs" scenarios, Slovenia will invest between SIT189.5 and SIT223.5 billion in communal infrastructure over the period 1998–2002, equivalent to 1.1 to 1.4 percent of its GDP. In contrast, the "Actual Level" scenario put the level of communal infrastructure at a drastically lower level, only SIT69.5 billion or 0.4 percent of GDP.

The four scenarios clearly indicate a large gap between the identified needs for communal infrastructure investment (the three "Investment Needs" scenarios) and investment in communal infra-

Table 3.3 Cumulative Investment Under the Three "Investment Needs" Scenarios, 1998–2002
In SIT Billion; Constant Prices

	<i>"Mrak Investment Needs" scenario</i>		<i>"PHARE Investment Needs" scenario</i>		<i>"Survey Investment Needs" scenario</i>		<i>"Actual Level" scenario</i>	
	<i>Volume</i>	<i>% of GDP</i>	<i>Volume</i>	<i>% of GDP</i>	<i>Volume</i>	<i>% of GDP</i>	<i>Volume</i>	<i>% of GDP</i>
Total	223.5	1.4	189.5*	1.1	200.5**	1.2	65.9***	0.4
Budget financing****	147.5	0.9	125.1	0.8	62.9	0.4	43.5	0.3
<i>Memorandum items</i>		<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>Total</i>	
GDP growth (%)		4.0	4.0	4.75	4.75	4.75	—	
GDP (in SIT billion; 1997 prices)		3,022	3,143	3,292	3,441	3,595	16,493	

— Not applicable.

* Exchange rate 1 ECU = 185 SIT (September 1998).

** Volume is calculated under the assumption that the 1998–2002 communal infrastructure investment needs of local communities covered in the sample represent one-sixth of total communal infrastructure needs in Slovenia in this period. Volume also includes projected investments for two waste incinerators (projected amount SIT40.7 billion).

*** Calculated as 0.4 percent of GDP projected for the 1998–2002 period.

**** For the "Mrak Investment Needs", "PHARE Investment Needs", and "Actual Level" scenarios, estimations are made on the basis of a projection that budget resources (local communities and the state) will contribute 66 percent to communal infrastructure investment (the same average proportion as the period 1995–1997). For the "Survey Investment Needs" scenario, volume is calculated under the assumption that the 1998–2002 budget financing projection for local communities covered in the sample represent one-sixth of total local community needs in Slovenia for communal infrastructure investment in this period. Volume also includes SIT26.9 billion for financing two waste incinerators (equivalent to 66 percent of total project costs for these projects).

Source: For "Total," tables 3.1, 3.2, and table 7 in Annex 2. For "Budget Financing," calculations based on budget resources for communal infrastructure investment in the period 1995–1997. Data is from Governmental Accounts, Ministry of Finance.

structure foreseen in the context of consistent and sustainable macroeconomic projections ("Actual Level" scenario). As shown in table 3.4, the gap is estimated at between SIT123.6 and SIT157.6 billion for the period 1998–2002, equivalent to between 0.7 and 1.0 percent of Slovenia's projected GDP. This gap means that investment needs are estimated to be more than two times higher than investments foreseen in the country's macroeconomic projection embodied in the "Actual Level" scenario.

Table 3.4 Cumulative Funding Gap, Based on the Three "Investment Needs" Scenarios, 1998–2002

	<i>Funding gap based on "Mrak Investment Needs" scenario</i>		<i>Funding gap based on "PHARE Investment Needs" scenario</i>		<i>Funding gap based on "Survey Investment Needs" scenario</i>	
	<i>Volume</i>	<i>% of GDP</i>	<i>Volume</i>	<i>% of GDP</i>	<i>Volume</i>	<i>% of GDP</i>
Total	157.6	1.0	123.6	0.7	134.4	0.8
Budget financing	104.0	0.6	81.6	0.5	19.4	0.1

Source: Calculated from table 3.3.

The funding gap reflects both significant underinvestment in communal infrastructure over recent years (below 0.5 percent of GDP between 1995 and 1997), and large investment needs (between 1.2 and 1.4 percent of GDP) resulting from the need for timely adjustment to continually tightening environmental protection standards.

The gap between communal infrastructure investment needs and funding availability over the 1997–2000 period raises at least two questions. First, to what extent is the funding gap to be financed from budgetary sources, and second, are these projections for budgetary transfers consistent with current and prospective macroeconomic and budgetary developments. Table 3.3 presents projected budget financing of communal infrastructure projects under all four scenarios and explains on what basis these projections are made.

There is a big discrepancy among the three “Investment Needs” scenarios with respect to projected budget financing for communal infrastructure financing. According to the “Mrak Investment Needs” and “PHARE Investment Needs” scenarios, it is predicted that budget transfers will amount to between SIT125.1 and SIT147.5 billion in the period 1998–2002, equivalent to between 0.8 and 0.9 percent of GDP. Under these two scenarios, budget transfers are therefore around three times as high as the level of budget financing projected in the “Actual Level” scenario (0.8 or 0.9 percent compared to 0.3 percent of GDP). This gap of 0.5 to 0.6 percent of GDP clearly indicates that budget transfers foreseen in both “Investment Needs” scenarios are completely unsustainable given Slovenia’s macroeconomic and budget proportions. The third However, the “Survey Investment Needs” scenario predicts budget flows for communal infrastructure financing at a much lower level, SIT62.9 billion, in the period 1998–2002, also implying much a smaller budget financing gap. Under this scenario, the gap is estimated at SIT19.4 billion, equivalent to 0.1 percent of the combined 1998–2002 GDP.

Why is the budget financing gap under the “Survey Investment Needs” scenario significantly lower than under the other two “Investment Needs” scenarios? The main reason seems to be the methodology under which the budget financing projections are made in the three scenarios. In the “Mrak Investment Needs” and “PHARE Investment Needs” scenarios, it is assumed that budget financing will cover the same proportion of communal infrastructure investment, 66 percent, as its average funding contribution in the 1995–1997 period. This assumption is based on two grounds; first, it is consistent with the overall philosophy of the two scenarios (that is, quantification of investment “needs”), and second, the existing funding pattern of communal infrastructure investment (that is, strong dependence on budget financing) will remain unchanged over the 1998–2002 period.

In contrast to the “Mrak Investment Needs” and “PHARE Investment Needs” scenarios, where projected budget transfers are calculated on the basis of macroeconomic assumptions, the “Survey Investment Needs” scenario budget transfer projection for the 1998–2002 period is calculated on the basis of the questionnaire replies received from local communities included in the sample. These replies clearly indicate that local communities are aware that the existing macroeconomic and budgetary situation in Slovenia gives little room for a substantial increase of budget funds for communal infrastructure investment. This also explains why the budget financing gap in the “Survey Investment Needs” scenario is much lower than that in the other two “Investment Needs”

scenarios. However, the "Survey Investment Needs" scenario projects that nonbudgetary sources, especially bank credits, will become in 1998–2002 a much more important source of funding than in the past. This conflicts with the existing limit for local community borrowing of 10 percent of budget revenues.

4. Policy Measures Conducive to a Higher Level of Communal Infrastructure Investment

In order to close or at least significantly reduce the identified gap between communal infrastructure investment needs and available public funds, Slovenia must design and implement a whole range of coordinated economic policy measures. All these measures have one common denominator—a more commercial approach to communal infrastructure sector development. The commercialization of infrastructure services refers to all reforms that stimulate a business approach to these activities.

Pricing of Communal Infrastructure Services

Core elements of the market-oriented transformation of public utilities in Slovenia is the introduction of cost-consciousness and demand-oriented production, and more careful pricing of services. The price reform and effective collection of tariffs are also crucial in balancing supply and demand for communal infrastructure services and achieving financial viability and accountability for infrastructure service providers. In the past, the overall level of prices and tariffs for services provided by public utilities has tended to be lower than costs. As a result of the government's general policy for containing inflation, this is still the case with end-user prices of many services provided by utilities, including communal services.

Tariff reform not only involves a general increase of prices and tariffs, but also their internal transformation. At present, the structure of tariffs in some communal infrastructure segments, like water supply, wastewater collection and treatment, and solid waste management, weights more heavily on enterprises than on households. This reflects the role of communal infrastructure in allocating benefits and resources in the pre-transition period and also public resistance to rebalancing tariff structures due to their negative social implications.

There is no doubt that a communal infrastructure service price and tariff increase would cause higher inflation in Slovenia, at least in the short term. This should, however, be compared with present low prices and their distorting consequences on the economy as a whole. Not only do customers get misleading signals as to the real value of infrastructure services, but one incentive for communal service efficiency is reduced, and this policy has also resulted in the deferment of urgent investments in communal infrastructure.

An increase of prices for communal infrastructure services must be accompanied by policy measures that address the negative effects of price and tariff increases on vulnerable segments of the population. The traditional system of indirect subsidy support through low tariffs must be replaced with a system whereby subsidies will come directly from the budget social safety net. These subsidies should be given to beneficiaries on the basis of clearly defined guidelines.

Competition, Including Restructuring of Service Providers and Private Sector Involvement

Tariff reform will not be successful if not accompanied by increased scope for competition. An extremely important policy for cost-effective provision of communal infrastructure services is the introduction of competition wherever possible. This private-sector entry into various communal infrastructure sectors and subsectors will take two forms, each applied depending on the specific characteristics of individual modes of infrastructure.

- *“Competition within the market.”* “Competition within the market” typically refers to firms competing for the same service, like transportation service between two points. This form of competition is typically more feasible and desirable for the supply of infrastructure services than of infrastructure itself, and has rather limited prospects in the area of communal services.
- *“Competition for the market.”* “Competition for the market” refers to firms competing for the right to provide service for a given period of time under concession or lease contract. This form of competition can bring efficiency gains in many areas of infrastructure provision management, particularly in small countries like Slovenia. Concessions and leases should become an important instrument of competition in all segments of communal infrastructure.

Introduction of competition in infrastructure sectors has typically been accompanied by continuous and more or less drastic restructuring of infrastructure service providers. They must adapt to new circumstances, including the requirements of the EU single market in these areas. Closely associated with restructuring of communal infrastructure service providers are issues related to the involvement of the private sector in the financing, construction, and operation of new infrastructure projects.

Legal and Regulatory Framework

Another important condition for improving the financial viability of communal infrastructure service providers is appropriate legislation that establishes a legal environment conducive to operational independence of enterprises. Although incorporation of enterprises in communal infrastructure has been formally completed in Slovenia, the process of actual separation of ownership, regulatory, and management functions is not complete. Therefore, further adjustments of the legal framework are needed to make operational the responsibilities and systems of accountability for

both managers and those within the government who have an ownership role. It is also necessary that rules of the game apply to all participants, which means that state-owned enterprises are subject to the same discipline of commercial law and bankruptcy as any private sector enterprise.

Infrastructure service providers must be properly supervised, particularly in situations where a monopoly or exclusive rights exist. Rules for evaluating performance and setting tariffs must be clear and workable for both the investors' and the public's interests. At present, Slovenia pursues a policy of informal supervision by the line ministries, with authority stemming from the state's part ownership in most service providers. This will not be sufficient where private companies enter the market.

Independent but accountable institutions in practically all infrastructure sectors are needed to oversee competition. The nature of the necessary regulation depends largely on the nature of the prevailing and potential competition. In the case of "competition in the market," regulation should be less concerned with the price control, but more with the issues related to safety, environmental, and technical standards. If conditions for granting licenses to operators are reasonably clear and nondiscriminatory, and an appropriate safety regime is enforced, regulation of these services can be left to competition agencies. When there is a "competition for the market", some amount of regulation is absolutely necessary to monitor compliance with the concession agreements signed between public authorities and private concessionaires.

5. Conclusions

The Current Situation in the Communal Sector

In the post-independence period, the legal and institutional framework in which Slovenian local communities and their respective communal sector enterprises operate has dramatically changed. Under these changes, ownership of communal infrastructure has been transferred to local communities that have also become responsible for investment. Communal investments have further been affected by the fragmentation of local communities. Communal sector enterprises that have previously operated on the “one local community, one communal service provider” principle are now faced with a situation where they have to operate with more than one local community, and often with more than one legal regime and tariff system.

Since early 1992, prices of communal services have been under continuous government control and the existing tariff structure weights more heavily on enterprises than on households. These two factors, accompanied by dramatic changes in the structure of communal service consumption, have strongly influenced financial performance of communal service providers. Analysis of financial statements for the 19 surveyed communal sector enterprises has confirmed that financial health of enterprises in this segment of the economy is worrying and well below the financial performance of the economy in general. Furthermore the surveyed communal sector enterprises had a negative return on equity and profit margin in 1997 (these two indicators were positive for Slovenian economy as a whole), and the trend is highly negative. Similarly negative trends have been registered in the sales realized by given assets. Finally, high and growing assets-to-equity and debt-to-equity ratios confirm that the surveyed communal sector enterprises are undercapitalized and highly indebted.

Communal Infrastructure Investment Needs and the Funding Gap

At present, Slovenia faces pressing needs for additional investments in communal infrastructure. To improve the quality of people’s lives, increase environmental protection standards, and facilitate the country’s accession to the European Union, investments are needed in practically all segments of communal infrastructure in order to improve and expand the provision of services.

Two empirical studies made from the macroeconomic perspective and the survey based on a sample of 26 local communities indicate that the traditional path of public sector financing of communal infrastructure projects will not provide all the required investments. In fact, estimates regarding communal sector investment needs and public funds available reveal a gap in financing of between SIT123.6 and SIT157.6 billion for the period 1998–2002, equivalent to between 0.7 and 1.0 percent of Slovenia's projected GDP. This funding gap actually means that communal investment needs are estimated to be more than two times higher than investments foreseen for this sector in the country's macroeconomic projection. Low levels of communal investment in the past seem to be directly linked to ambitious investment plans for the next 5-year period aimed at reducing the growing gap between the needs for communal services and their actual availability.

Budget financing has traditionally been the single most important source of communal infrastructure investment. In spite of the differences in estimating the level of the budget funding gap for communal infrastructure projects, all three of the investment needs scenarios discussed in the study point to the same general conclusion. Under the existing funding patterns, characterized by low levels of internal financing and no access to borrowing, ambitious communal infrastructure investment plans can be financed only through strong budget participation. As this is not consistent with the country's macroeconomic and budgetary projections, the overall structure of investment funding has to be drastically changed. Without an increase of nonbudgetary sources of financing, requiring significant economic policy adjustment, investment in communal infrastructure will continue to be depressed.

Policy Measures Conducive to Higher Levels of Communal Infrastructure Investment

Given the gap between communal infrastructure investment needs and available public funds, Slovenia has two main alternatives for dealing with this problem.

The first one, called "*status quo alternative*," implies that no major changes will be made in the conditions under which local communities and communal infrastructure service providers operate. If Slovenia opts for this alternative, either actively or by just doing nothing, two consequences can be expected. First, the volume of communal infrastructure financing will continue to be depressed. Second, the funding structure of investments will retain its traditional strong reliance on budget financing. Because of macroeconomic limitations, this alternative is not consistent with higher investment in communal infrastructure, and its implementation would therefore not contribute toward reducing the gap between communal infrastructure investment needs and funding availability.

Another and according to this author more appropriate alternative for communal infrastructure development and financing is the "*market-oriented alternative*." This alternative argues for the establishment of a business environment conducive to commercially viable operation of infrastructure sectors. The government will have to design and put into operation a well-coordinated mix of policy measures aimed at (1) easing price controls on communal services and redefining

their tariff setting, (2) strengthening competition among communal service providers, (3) creating a legal framework conducive to private investors, and (4) establishing an appropriate regulatory system with a clear and coherent allocation of powers and responsibilities. Only if these measures are introduced and put into operation, is it realistic to expect the improved financial standing of local communities and communal infrastructure service providers. This would not only strengthen their capacities to generate internal resources required for investment funding, but would also improve their creditworthiness and consequently their access to bank financing. Commercial viability of the communal infrastructure sector, accompanied by a stable legal and regulatory environment, would also increase the business attractiveness of the sector for new private entrants. All this bodes well for a higher level of communal infrastructure investments and therefore for a smaller funding gap in this area.

Annex 1

Table A.1.1 Asset and Liabilities Account of the Surveyed Communal Sector Enterprises, 1995–1997 (In SIT)

	Item's code	All enterprises	All communal sector enterprises				Surveyed communal sector enterprises		
		1997	1995	1996	1997	1995	1996	1997	
ASSETS AND CAPITAL ACCOUNT									
A. FIXED ASSETS (002+003+006+007)	001	4,836,966,600	120042907	135834539	179455374	15074428	19089237	23755219	
I. Intangible fixed assets	002	75563500	911939	890951	1165751	152386,9	170829	205808	
II. Tangible fixed assets (004+005)	003	4025874500	117447658	133207119	176007630	14770444	18747219	23107153	
1. Land and buildings	004	2899104500	103747848	117007034	157449304	13507781	16270272	19927698	
2. Equipment and other tangible assets	005	1126770000	13742690	16200085	18558326	1305544	2476947	3179455	
III. Long-term financial investment	006	713658300	1685945	1736469	2237955	154234,9	171189	442258	
IV. Capital adjustment	007	21870300	0	0	44038	6999	0	0	
B. CURRENT ASSETS (009+014+...+018)	008	2544056400	16827291	18287988	19933057	2388088	2912059	3361589	
I. Inventories (010+...+013)	009	681175300	1956803	1809611	1813717	279567,8	273659	283997	
1. Inventories of material	010	196868000	1851716	1672847	1667011	273584,9	266080	274659	
2. Work in progress	011	117918000	0	28029	25771	0	0	0	
3. Products	012	112054000	0	6854	2915	0	0	0	
4. Inventories of goods	013	254335000	0	101881	118020	9275	7579	9338	
II. Long-term operating receivables	014	109385200	1253971	1091672	1140648	5726	5565	5133	
III. Short-term receivables	015	1189742800	9042507	9727737	10525524	1716485	1954998	2310865	
IV. Short-term investments	016	420505900	0	4328349	4779659	187979	404366	501223	
V. Cash	017	117653000	1098924	1189099	1533809	173946,1	216165	196239	
VI. Prepayments and accrued revenues	018	25594000	95559	141520	139700	17461,09	57306	64132	
C. ASSETS (001+008)	019	7381023000	136734083	154122527	199388431	17326401	22001296	27116808	
D. OFF-BALANCE SHEET ASSETS	020	731771000	0	29861635	8215698	2415602	2195814	2257846	
i. EQUITY (022+...+025+027+028-026-029)	021	3810494300	70095970	75169742	79883095	4654921	4430272	4350202	
1. Subscribed capital	022	2051685900	45456444	45522382	45148153	3119199	2692657	2449185	
2. Paid-in capital surplus	023	54342400	0	0	0	0	0	0	
3. Reserves	024	380164700	0	970899	1615128	124443	156608	172348	
4. Transferred net profit from previous year	025	200412800	0	1044262	1151915	44385	67980	114188	
5. Transferred net loss from previous year	026	460184100	0	1562632	2695432	26782	33727	63725	
6. Capital revaluation adjustment	027	1590722500	23735727	29255905	35036012	1294971	1473908	1685723	
7. Undistributed net profit of business year	028	174440900	555512	1113680	1101654	68322	108400	32756	
	Item's code	All enterprises economy	All communal sector enterprises				Surveyed communal sector enterprises		
		1997	1995	1996	1997	1995	1996	1997	
8. Net Loss of Business Year	029	181090800	958609	1174754	1474335	7589	35554	40273	
ii. LONG-TERM PROVISIONS	030	223386900	0	9757896	11685174	454499	434734	516792	
iii. LONG-TERM LIABILITIES	031	1112881800	48351112	57633565	94821068	10057037	14584255	19161420	
iv. SHORT-TERM LIABILITIES (033+034)	032	2132184000	9615915	10854760	12104696	1719321	2268563	2611682	
1. Short-term operating liabilities	033	1498605800	8202112	9570845	10387547	1427896	2013611	2346581	
2. Short-term financial liabilities	034	633578200	1405790	1283915	1717149	283412	254952	265101	
E. ACCRUALS AND DEFERRED PAYMENTS	035	102076000	0	706564	894398	116564	283472	476712	
F. TOTAL EQUITY AND LIABILITIES (021+030+031+032+035)	036	7381023000	136734083	154122527	199388431	17326401	22001296	27116808	
G. OFF-BALANCE SHEET LIABILITIES	037	731771000	0	29861635	8215698	2415602	2195814	2257846	

Source: Agency of Payments database.

Table A.1.2 Profit and Loss Account of the Surveyed Communal Sector Enterprises, 1995–1997
(In SIT)

	Item's code	All enterprises		All communal sector enterprises		Surveyed communal sector enterprises		
		1997	1995	1996	1997	1995	1996	1997
A. NET SALES (051+...+054)	050	5983235000	35633044	39731541	42712231	6401960	7875229	8486555
I. Revenues from sales of products and services on domestic market	051	2395150000	33934336	38995784	40845754	6055424	7829951	8434810
II. Revenues from sales of products and services on foreign market	052	1356962000	0	151816	467476	0	0	39423
III. Revenues from sales of goods and materials on domestic market	053	2038257000	1249521	574865	1399001	167986	45278	12322
IV. Revenues from sales of goods and materials on foreign market	054	192864000	0	9076	0	0	0	0
B. INCREASE IN INVENTORIES OF GOODS AND WORK-IN-PROGRESS	055	37900000	0	25141	5226	0	0	0
C. DECREASE IN INVENTORIES OF GOODS AND IN WORK-IN-PROGRESS	056	27168000	0	5027	4313	0	0	0
D. USE OF PRODUCTS AND SERVICES, GOODS AND MATERIALS FOR OWN NEEDS	057	38282000	0	1227405	1242476	214189	207308	143597
E. REVENUES FROM SALES-MISCELLANEOUS	058	48221000	0	479208	609357	10147	17653	16597
F. GROSS REVENUE (050+055+056+057+058)	059	6080470000	36794790	41458268	44564977	6609892	8100190	8646749
G. COSTS OF COMMERCIAL GOODS, MATERIALS, SERVICES (061+062+063)	060	4560282000	17720897	20163868	21419773	3208272	4178493	4392513
I. Purchase value of goods and services	061	1892964000	0	702209	1069190	22271	178846	165701
II. Costs of material	062	1630534000	9534896	10782429	11013851	1436077	1849917	2065363
III. Costs of services	063	1036783000	7728580	8679230	9336732	1689598	2149730	2161449
H. LABOR COSTS (065+066+067)	064	1002793000	12514763	13722475	14817921	2287419	2690351	3091416
I. Salaries	065	712350000	8884442	9835850	10602035	1605418	1882860	2137844
II. Social security payments	066	125876000	1968978	1824019	1873196	349691	346634	377308
III. Other labor costs	067	164566000	1662106	2062606	2342690	333074	460857	576264
J. DEPRECIATION	068	330089000	5851793	6756165	8125524	899685	1067456	1207671
K. LONG TERM PROVISIONS	070	30137000	0	744713	148506	20886	25798	29689
L. OTHER COSTS	071	44909000	465763	534733	610178	89413	103722	119077
M. OPERATING PROFIT (059+060+064+068+...+071)	072	193263000	646305	732026	901377	102728	106345	534
N. OPERATING LOSS (060+064+068+...+071-059)	073	142747000	1652744	1726833	2279034	58316	162059	286638

	Item's code	All enterprises		All communal sector enterprises		Surveyed communal sector enterprises		
		1997	1995	1996	1997	1995	1996	1997
O. FINANCIAL REVENUES (075+076)	074	235545000	1533772	1048473	1331007	154654	191745	216462
I. Business shares in profit of other enterprises	075	22017000	14635	23540	47344	5938	7660	3619
II. Other financial revenues	076	231528000	1519529	1024933	1283663	149108	184085	212843
P. WRITE OFFS OF LONG & SHORT TERM FINANCIAL INVESTMENTS	077	75460000	173496	210454	30058	6245	6958	903
Q. FINANCIAL EXPENSES	078	262185000	1079797	1189767	1138425	122221	124619	96338
R. PROFIT BEFORE TAXATION (072+074-073-077-078)	079	169292000	669554	851950	1112264	85746	98661	13582
S. LOSS BEFORE TAXATION (073+077+078-072-074)	080	220875000	1417269	2198505	2327397	36899	94207	180465
T. EXTRAORDINARY REVENUES (082+083)	081	210431000	1040461	1888921	1647777	131579	174829	238796

	Item's code	All enterprises		All communal sector enterprises		Surveyed communal sector enterprises		
		1997	1995	1996	1997	1995	1996	1997
I. Extraordinary revenues from eliminated provisions	082	37288000	0	582930	606024	23073	16001	48552
II. Other extraordinary revenues	083	173144000	966688	1305991	1041753	108506	158828	190244
U. EXTRAORDINARY EXPENSES (085+086)	084	140988000	561177	495320	746390	100238	83061	76111
I. Extraordinary expenses from covering loss from previous year	085	12167000	0	22590	77926	7873	0	0
II. Other extraordinary expenses	086	128821000	449327	472730	668464	91779	83061	76111
V. TOTAL PROFIT (079+081-080-084)	087	198855000	684137	1221800	1160589	81737	131776	36075
W. TOTAL LOSS (080+084-079-081)	088	180995000	958608	1174754	1474335	7589	35554	40273
X. ALLOCATION OF PROFIT FOR TAXES, CONTRIBUTIONS	089	21729000	0	36813	28489	4719	6517	2460
Y. NET PROFIT OF BUSINESS YEAR (087-089)	090	177258000	669872	1184987	1132100	77018	125259	33615
Z. NET LOSS OF BUSINESS YEAR (089-087)	091	181126000	958608	1174754	1474335	7589	35554	40273
Average number of employed (based on hours worked)	092	460376	6503	6467	6224	1298	1368	1365

Source: Agency of Payments database.

Table A.1.3 Performance Indicators for the Surveyed Commercial Sector Enterprises, 1995–1997

	All enterprises		All communal sector enterprises			Surveyed communal sector enterprises		
	1997	1995	1996	1997	1995	1996	1997	
Total sales (in SIT thousands)	6515714000	38207278	44375548	47542848	6912530	8466764	9102007	
Operating profit / equity	0.05	0.01	0.01	0.01	0.02	0.02	0.00	
Operating profit / employee (in 000 SIT)	420	99	113	145	79	78	0	
Operating loss / equity	0.04	0.02	0.02	0.03	0.01	0.04	0.07	
Operating loss / employee (in 000 SIT)	310	254	267	366	45	118	210	
Total profit / equity	0.05	0.01	0.02	0.01	0.02	0.03	0.01	
Total loss / equity	0.05	0.01	0.02	0.02	0.00	0.01	0.01	
Operating profit / total profit	0.97	0.94	0.60	0.78	1.26	0.81	0.01	
Operating loss / total loss	0.79	1.72	1.47	1.55	7.68	4.56	7.12	
Fixed assets / assets	0.66	0.88	0.88	0.90	0.87	0.87	0.88	
Intangible fixed assets / assets	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Tangible fixed assets / assets	0.03	0.00	0.00	0.00	0.00	0.00	0.00	
Current assets / assets	0.34	0.12	0.12	0.10	0.14	0.13	0.12	
Income / gross revenues	0.20	0.36	0.37	0.36	0.36	0.35	0.36	
Income / employee (in 000 SIT)	2,663	2,024	2,350	2,549	1,857	2,063	2,287	
Costs of commercial goods, materials & services / gross revenue	0.75	0.48	0.49	0.48	0.49	0.52	0.51	
Labor costs / net sales	0.17	0.35	0.35	0.35	0.36	0.34	0.36	
Labor costs / employee (in 000 SIT)	2,178	1,924	2,122	2,381	1,762	1,967	2,265	
Salaries / employee (in 000 SIT)	1,547	1,366	1,521	1,703	1,236	1,376	1,566	
Subscribed capital / equity	0.54	0.65	0.61	0.57	0.67	0.61	0.56	
Long- and short-term liabilities / equity	0.85	0.83	0.91	1.34	2.53	3.80	5.01	
Equity / total equity and liabilities	0.52	0.51	0.49	0.40	0.27	0.20	0.16	
Equity, long-term provisions & liabilities / total equity & liabilities	0.70	0.87	0.92	0.93	0.88	0.88	0.89	
Long-term provisions / total equity & liabilities	0.03	0.00	0.06	0.06	0.03	0.02	0.02	
Short-term liabilities / total equity & liabilities	0.29	0.07	0.07	0.06	0.10	0.10	0.10	
Long-term liabilities / total equity & liabilities	0.15	0.35	0.37	0.48	0.58	0.66	0.71	
Financial revenues / financial expenses	0.90	1.42	0.88	1.17	1.27	1.54	2.25	
Equity, long-term provisions & liabilities / fixed assets	1.06	0.99	1.05	1.04	1.01	1.02	1.01	
Short-term receivables, investment, cash / short-term liabilities	0.81	1.05	1.40	1.39	1.21	1.14	1.15	

Source: Agency for Payments database.

Annex 2

Table A.2.1 Local Communities Covered in the Sample

<i>No.</i>	<i>Local community</i>	<i>Population (end 1997)</i>
A	<i>SLC – small local communities</i>	<i>Population less than 5,000</i>
1	Gornji Grad	2,670
2	Kobilje	639
3	Loški Potok	2,092
4	Nazarje	2,526
5	Odranci	1,735
6	Radeče	4,613
7	Škocjan	2,979
8	Vitanje	2,428
Total A		19,682
B	<i>MLC – medium sized local communities</i>	<i>Population between 5,000–15,000</i>
9	Beltinci	8,476
10	Črenšovci	6,036
11	Grosuplje	14,788
12	Lendava	13,355
13	Logatec	10,583
14	Mozirje	6,284
15	Radlje ob Dravi	6,235
16	Ribnica	11,261
17	Šentjernej	6,542
18	Vojnik	9,767
Total B		93,327
C	<i>LLC – large local communities</i>	<i>Population above 15,000</i>
19	Jesenice	26,158
20	Krško	27,973
21	Ljutomer	18,574
22	Murska Sobota	20,670
23	Novo Mesto	51,608
24	Slovenj Gradec	16,764
25	Trebnje	18,104
26	Tržič	15,046
Total C		194,879
Total A + B + C		307,906

Source: Agency for Payments database.

Table A.2.2 Volume and Structure of Investment, 1995–1997 (In SIT Million)

No.	Local community	Communal infrastructure	Roads	Other	Total	Communal infrastructure as a percent of total
A SLC						
1	Gornji Grad	75.1	95.2	33.0	203.3	36.9
2	Kobilje	31.8	11.7	56.3	99.8	31.9
3	Loški Potok	44.6	175.0	20.2	239.8	18.6
4	Nazarje	44.5	37.5	73.6	155.6	28.6
5	Odranci	146.0	46.0	37.0	229.0	63.8
6	Radeče	190.0	67.5	127.5	385.0	49.4
7	Škocjan	44.9	...	...	...	...
8	Vitanje	6.0	60.0	30.0	96.0	6.3
Total A		538.0*	492.9	377.6	1,408.5	38.2
B MLC						
9	Bečinci	121.0	42.0	116.0	279.0	43.4
10	Crenšovci	50.5	52.1	268.2	370.8	13.6
11	Grosuplje	199.9	266.4	637.3	1,103.6	18.1
12	Lendava	108.0	...	...	...	...
13	Logatec	180.0	180.0	216.0	576.0	31.2
14	Mozirje	32.0	143.0	63.0	238.0	13.4
15	Radlje ob Dravi	15.8	86.7	142.9	245.4	6.4
16	Ribnica	66.1	245.6	859.9	1,171.6	5.6
17	Šentjernej	97.0	...	...	...	...
18	Vojnik	121.7	129.0	195.5	356.2	34.2
Total B		787.0*	1,144.8	2,408.8	4,340.6	18.1
C LLC						
19	Jesenice	780.0	99.0	706.0	1,585.0	49.2
20	Krško	421.4	529.0	1,113.5	2,063.9	20.4
21	Ljutomer	142.0	111.8	344.7	598.5	23.7
22	Murska Sobota	666.0	285.0	741.0	1,692.0	39.4
23	Novo Mesto	1,644.4	...	...	...	...
24	Slovenj Gradec	266.0	346.0	703.9	1,315.9	20.2
25	Trebnje	209.9	338.0	224.0	852.9	34.1
26	Tržič	127.0	...	...	...	...
Total C		2,566.3*	1,708.8	3,833.1	8,108.2	31.7
Total A + B + C		3,891.3*	3,346.5	6,619.5	13,857.3	28.1

... Negligible.

Data for Škocjan, Šentjernej and Novo Mesto are excluded.

Source: Agency for Payments database.

Table A.2.3 Structure of Communal Infrastructure Investment, 1995–1997 (In SIT Million)

No.	Local community	Water supply	Sewage	Waste-water treatment	Solid waste management	Other	Total
<i>A SLC</i>							
1	Gornji Grad	1.7	38.2	2.7	27.1	5.4	75.1
2	Kobilje	0.0	31.8	0.0	0.0	0.0	31.8
3	Loški Potok	6.1	1.0	0.0	1.0	36.5	44.6
4	Nazarje	10.0	29.5	0.7	3.8	0.5	44.5
5	Odranci	1.0	105.0	40.0	0.0	0.0	146.0
6	Radeče	0.0	0.0	140.0	50.0	0.0	190.0
7	Škocjan	39.1	1.9	2.0	1.9	0.0	44.9
8	Vitanje	4.0	1.0	0.0	1.0	0.0	6.0
Total A		61.9	208.4	185.4	84.8	42.4	582.9
<i>B MLC</i>							
9	Beltinci	96.0	25.0	0.0	0.0	0.0	121.0
10	Črenšovci	4.9	45.6	0.0	0.0	0.0	50.5
11	Grosuplje	40.0	124.4	0.0	16.0	19.5	199.9
12	Lendava	22.0	86.0	0.0	0.0	0.0	108.0
13	Logatec	90.0	90.0	0.0	0.0	0.0	180.0
14	Mozirje	4.0	18.0	0.0	10.0	0.0	32.0
15	Radlje ob Dravi	14.3	1.5	0.0	0.0	0.0	15.8
16	Ribnica	17.7	48.4	0.0	0.0	0.0	66.1
17	Šentjernej	91.9	3.2	0.2	1.7	0.0	97.0
18	Vojnik	64.2	8.4	0.0	0.0	49.1	121.7
Total B		445.0	450.5	0.2	27.7	68.6	992.0
<i>C LLC</i>							
19	Jesenice	21.0	53.0	33.0	333.0	340.0	780.0
20	Krško	346.5	56.5	0.0	18.4	0.0	421.4
21	Ljutomer	65.8	40.1	33.2	2.9	0.0	142.0
22	Murska Sobota	70.0	174.0	292.0	80.0	50.0	666.0
23	Novo Mesto	726.0	318.9	319.0	82.1	198.4	1,644.4
24	Slovenj Gradec	85.0	38.0	0.0	103.0	40.0	266.0
25	Trebnje	162.0	16.9	10.3	101.7	0.0	290.9
26	Tržič	37.0	72.0	1.0	17.0	0.0	127.0
Total C		1,513.3	769.4	688.5	738.1	628.4	4,337.7
Total A + B + C		2,020.2	1,428.3	874.1	850.6	739.4	5,912.6

Source: Agency for Payments database.

Table A.2.4 Sources of Funds for Communal Infrastructure Investment, 1995–1997
(In SIT Million)

No.	Local community	Provider of services	Local community budget	Water pollution tax	State budget	Community members financial participation	Eco Fund	Other	Total
<i>A SLC</i>									
1	Gornj Grad	...	...	...	...	...	...	...	...
2	Kobilje	0.0	0.0	0.0	12.0	4.8	15.0	0.0	31.8
3	Loški Potok	4.2	19.4	0.0	21.0	0.0	0.0	0.0	44.6
4	Nazarje	0.0	29.2	5.2	7.6	0.0	0.0	2.5	44.5
5	Odranci	0.0	41.0	0.0	55.0	16.0	0.0	34.0	146.0
6	Radeče	0.0	105.3	7.7	54.2	0.0	22.8	0.0	190.0
7	Škocjan	44.9	0.0	0.0	0.0	0.0	0.0	0.0	44.9
8	Vitanje	0.0	6.0	0.0	0.0	0.0	0.0	0.0	6.0
Total A		49.1	200.9	12.9	149.8	20.8	37.8	36.5	507.8*
<i>B MLC</i>									
9	Beltinci	0.0	103.0	0.0	0.0	9.0	0.0	9.0	121.0
10	Črenšovci	0.0	42.5	0.0	8.0	0.0	0.0	0.0	50.5
11	Grosuplje	0.0	113.5	21.3	20.6	0.0	29.1	15.4	199.9
12	Lendava	20.0	0.0	24.0	0.0	8.0	34.0	22.0	108.0
13	Logatec	44.0	122.0	5.0	9.0	0.0	0.0	0.0	180.0
14	Mozirje	0.0	32.0	0.0	0.0	0.0	0.0	0.0	32.0
15	Radlje ob Dravi	0.0	4.8	1.5	0.0	0.0	9.5	0.0	15.8
16	Ribnica	0.0	53.8	12.3	0.0	0.0	0.0	0.0	66.1
17	Šentjernej	84.3	0.7	0.0	0.0	0.0	12.0	0.0	97.0
18	Vojnik	0.0	103.2	0.0	6.5	7.3	4.7	0.0	121.7
Total B		148.3	575.5	64.1	44.1	24.3	89.3	46.6	992.0
<i>C LLC</i>									
19	Jesenice	170.0	283.0	19.0	76.0	0.0	53.0	179.0	780.0
20	Krško	0.0	352.4	0.0	69.0	0.0	0.0	0.0	421.4
21	Ljutomer	...	...	...	...	...	...	...	142.0**
22	Murska Sobota	94.0	294.0	27.0	107.0	57.0	0.0	87.0	666.0
23	Novo Mesto	1,128.4	121.8	77.0	91.1	0.0	125.8	100.3	1,644.4
24	Slovenj Gradec	0.0	165.0	35.0	0.0	0.0	0.0	66.0	266.0
25	Trebnje	75.2	89.1	0.0	89.3	0.0	37.3	0.0	290.9
26	Tržič	0.0	88.0	26.0	0.0	0.0	0.0	13.0	127.0
Total C		1,467.6	1,393.3	184.0	432.4	57.0	216.1	445.3	4,195.7
Total A + B + C		1,665.0	2,169.7	261.0	626.3	102.1	343.2	528.2	5,695.5

... Negligible.

* Data for Gornji Grad excluded.

** Data for Ljutomer excluded.

Source: Agency for Payments database.

Table A.2.5 Level of Communal Infrastructure Investment Plan Implementation, 1995–1997
(In Percent)

No.	Local community	Water supply	Sewage	Wastewater treatment	Solid waste management
<i>A SLC</i>					
1	Gornji Grad	n.a.	n.a.	n.a.	n.a.
2	Kobilje	*	D	*	*
3	Loški Potok	C	*	*	B
4	Nazarje	D	D	B	B
5	Odranci	D	D	D	D
6	Radeče	*	*	A	A
7	Škocjan	B	C	C	C
8	Vitanje	D	A	A	B
<i>B MLC</i>					
9	Beltinci	D	D	*	*
10	Črenšovci	D	A	A	*
11	Grosuplje	C	D	*	B
12	Lendava	B	C	*	A
13	Logatec	C	D	*	C
14	Mozirje	B	B	D	D
15	Radlje ob Dravi	B	*	*	D
16	Ribnica	B	C	*	*
17	Šentjernej	C	C	A	D
18	Vojnik	C	B	*	*
<i>C LLC</i>					
19	Jesenice	D	D	D	B
20	Krško	D	D	D	D
21	Ljutomer	B	A	A	A
22	Murska Sobota	D	D	D	D
23	Novo Mesto	B	D	D	C
24	Slovenj Gradec	D	D	*	D
25	Trebnje	A	A	B	C
26	Trzič	D	D	*	B

n.a. Not available.

A – below 25 percent.

B – between 26 percent and 50 percent.

C – between 51 percent and 75 percent.

D – above 75 percent.

* No investment planned.

Source: Agency for Payments database.

Table A.2.6 Reasons for Poor Implementation of 1995–1997 Communal Infrastructure Investment Plan

From 1–not important to 5–very important

No.	Local community	Over-ambitious investment plans	Higher priority of investments in other areas	Project documentation not ready	Low prices of communal services	Debt raising constraint of local communities	Poor financial status of service providers
A SLC							
1	Škocjan	3	5	...	5	5	1
2	Vitanje	2	3	4	1	5	...
Average A		2.5	4.0	4.0	3.0	5.0	1.0
B MLC							
3	Črenšovci	...	4	4	...	...	...
4	Grosuplje	3	5	2	2	1	1
5	Lendava	1	5	2	5	5	5
6	Mozirje	3	3	4	5	4	5
7	Radlje ob Dravi	1	5	1	5	5	5
8	Ribnica	2	3	3	5	1	5
9	Šentjernej	3	5	...	5	5	1
10	Vojnik	3	3	3	...	5	4
Average B		2.3	4.1	2.7	4.5	3.7	3.7
C LLC							
11	Jesenice	3	1	2	5	5	5
12	Ljutomer	4	4	3	5	5	3
13	Murska Sobota	...	...	...	...	...	...
14	Novo Mesto	3	5	...	5	5	1
15	Trebnje	1	5	5	5	3	4
16	Tržič	1	3	3	5	...	3
Average C		2.4	3.6	3.3	5.0	4.3	3.2
Average total A + B + C		2.4	3.9	3.0	4.5	4.2	3.3

... Negligible.

Note: Only those local communities with had implementation ratio below 75 percent in 3 out of 4 areas in table 5 were asked to respond to this question.

Source: Agency for Payments database.

Table A.2.7 Volume and Structure of Communal Infrastructure Investment Plans, 1998–2002
(In SIT Million)

No.	Local community	Water supply	Sewage	Waste-water treatment	Solid waste management	Other	Total
<i>A SLC</i>							
1	Gornji Grad	13.2	11.1	51.1	78.7	192.6	346.7
2	Kobilje	100.0	30.0	51.0	0.0	50.0	231.0
3	Loški Potok	240.0	95.0	52.0	100.0	0.0	487.0
4	Nazarje	15.0	22.3	7.9	27.8	20.0	93.0
5	Odranci	0.0	10.0	45.0	0.0	0.0	55.0
6	Radeče	0.0	0.0	110.0	150.0	0.0	260.0
7	Škocjan	243.9	62.0	76.0	0.0	0.0	381.9
8	Vitanje	30.0	171.0	170.0	14.0	223.0	608.0
Total A		642.1	401.4	563.0	370.5	485.6	2,462.6
<i>B MLC</i>							
9	Beltinci	240.0	915.0	310.0	10.0	154.0	1,629.0
10	Črenšovci	0.0	1,005.0	156.0	0.0	0.0	1,161.0
11	Grosuplje	361.9	306.9	25.0	319.5	125.8	1,139.1
12	Lendava	104.0	860.0	430.0	70.0	0.0	1,464.0
13	Logatec	134.0	91.0	283.0	51.0	0.0	559.0
14	Mozirje	71.0	107.0	22.0	12.0	5.0	217.0
15	Radlje ob Dravi	75.0	335.0	150.0	94.0	0.0	654.0
16	Ribnica	165.0	150.0	200.0	130.0	55.0	700.0
17	Šentjernej	288.6	112.5	160.0	0.0	0.0	561.1
18	Vojnik	447.0	304.4	180.0	0.0	0.0	931.4
Total B		1,886.5	4,186.8	1,916.0	686.5	339.8	9,015.6
<i>C LLC</i>							
19	Jesenice	92.0	232.0	106.0	213.0	460.7	1,103.7
20	Krško	...	...	...	...	...	...
21	Ljutomer	384.0	480.0	420.0	250.0	490.0	2,024.0
22	Murska Sobota	315.0	867.0	800.0	1,100.0	55.0	3,137.0
23	Novo Mesto	1,869.4	626.6	350.5	1,100.0	219.5	4,166.0
24	Slovenj Gradec	300.0	115.0	1,075.0	200.0	554.0	2,244.0
25	Trebnje	337.0	369.0	200.0	900.0	0.0	1,806.0
26	Tržič	251.0	352.0	95.0	90.0	0.0	788.0
Total C		3,548.4	3,041.6	3,046.5	3,853.0	1,779.2	15,268.7
Total A + B + C		6,077.0	7,629.8	5,525.5	4,910.0	2,604.6	26,746.9

... Negligible.

Source: Agency for Payments database.

Table A.2.8 Annual Level of Communal Infrastructure Investment Plans, 1998–2002
(In SIT Million)

No.	Local community	1998	1999	2000	2001	2002	Total
A SLC							
1	Gornji Grad	138.2	173.6	25.1	6.7	3.1	346.7
2	Kobilje	30.0	51.0	30.0	70.0	50.0	231.0
3	Loški Potok	11.0	53.0	122.0	150.0	151.0	487.0
4	Nazarje	29.8	49.3	10.4	2.5	1.0	93.0
5	Odranci	30.0	25.0	0.0	0.0	0.0	55.0
6	Radeče	120.0	80.0	60.0	0.0	0.0	260.0
7	Škocjan	17.0	24.2	59.6	88.9	192.2	381.9
8	Vitanje	10.0	137.0	187.0	137.0	137.0	608.0
Total A		386.0	593.1	494.1	455.1	534.3	2,462.6
B MLC							
9	Beltinci	52.0	97.0	540.0	490.0	450.0	1,629.0
10	Črenšovci	195.0	210.0	232.0	254.0	270.0	1,161.0
11	Grosuplje	182.7	241.2	218.7	268.0	228.5	1,139.1
12	Lendava	128.0	418.0	418.0	230.0	270.0	1,464.0
13	Logatec	74.0	59.0	162.0	142.0	122.0	559.0
14	Mozirje	18.0	94.0	38.0	46.0	21.0	217.0
15	Radlje ob Dravi	39.0	78.0	159.0	190.0	188.0	654.0
16	Ribnica	100.0	130.0	170.0	150.0	150.0	700.0
17	Šentjernej	81.2	130.5	181.6	78.0	89.8	561.1
18	Vojnik	61.0	129.0	231.0	235.0	275.4	931.4
Total B		930.9	1,586.7	2,350.0	2,083.0	2,064.7	9,015.6
C LLC							
19	Jesenice	137.6	278.1	246.0	235.0	207.0	1,103.7
20	Krško	273.5	...	...	...	...	...
21	Ljutomer	184.0	330.0	530.0	540.0	440.0	2,024.0
22	Murska Sobota	197.0	1,120.0	665.0	590.0	565.0	3,137.0
23	Novo Mesto	759.5	1,064.5	455.7	941.0	945.3	4,166.0
24	Slovenj Gradec	162.0	316.0	556.0	651.0	559.0	2,244.0
25	Trebnje	75.0	658.0	500.0	384.0	189.0	1,806.0
26	Tržič	105.0	125.0	158.0	185.0	215.0	788.0
Total C		1,620.1	3,891.6	3,110.7	3,526.0	3,120.3	15,268.7
Total A + B + C		2,937.0	6,071.4	5,955.1	6,064.1	5,719.3	26,746.9

Source: Agency for Payments database.

Table A.2.9 Reasons for High 1998–2002 Communal Infrastructure Investment Plans
From 1–not important to 5–very important

No.	Local community	Growing demand for communal services	Deferment of investment in the past	Expected improvements in financial status of service providers	Better access to credits/ other financial sources	Adjustment to EU norms	Expected improvement with respect to project documentation	Introduction or continuation of community members financial participation	Expected private sector participation in financing and/or providing services
A SLC									
1	Gornj Grad	...	4	3	2	4	4	...	2
2	Kobilje	5	3	1	5	5	2	5	1
3	Loški Potok	2	5	3	2	4	4	3	3
4	Nazarje	3	4	2	4	4	2	1	2
5	Odranci	...	...	...	...	...	...	...	...
6	Radeče	5	5	5	5	5	5	1	1
7	Škocjan	5	2	2	4	5	1	2	1
8	Vitanje	4	5	4	4	4	3	3	4
Average A		4.0	4.0	2.9	3.7	4.4	3.0	2.5	2.0
B MLC									
9	Beltinci	5	3	...	4	4	2	5	4
10	Črenšovci	5	4	4	4	4	2	1	2
11	Grosuplje	5	4	4	5	5	4	3	4
12	Lendava	5	5	5	4	4	4	5	4
13	Logatec	4	5	2	3	3	2	1	...
14	Mozirje	4	4	5	5	4	1	1	2
15	Radlje ob Dravi	5	4	5	5	5	5	3	...
16	Ribnica	5	4	3	5	3	2	1	3
17	Šentjernej	5	2	2	4	5	1	2	1
18	Vojnik	4	4	3	4	5	4	3	1
Average B		4.7	3.9	3.7	4.3	4.2	2.7	2.5	2.6
C LLC									
19	Jesenice	3	4	4	3	5	4	1	2
20	Krško	5	2	3	3	3	3	1	3
21	Ljutomer	4	4	3	4	3	3	4	1
22	Murska Sobota	5	5	1	3	3	1	3	4
23	Novo Mesto	5	2	2	4	5	1	2	1
24	Slovenj Gradec	5	4	1	5	4	1	3	3
25	Trebnje	4	4	3	3	4	5	4	2
26	Tržič	2	4	2	3	4	4	1	1
Average C		4.1	3.6	2.4	3.5	3.9	2.8	2.4	2.1
Average Total A + B + C		4.3	3.8	3.0	3.9	4.2	2.8	2.5	2.3

... Negligible.

Source: Agency for Payments database.

Table A.2.10 Most Important Reasons for Possible Delays in the Implementation of 1998–2002 Communal Infrastructure Investment Plans

No	Local community	Reason no. 1	Reason no. 2	Reason no. 3
<i>A SLC</i>				
1	Gornji Grad	A	E	G
2	Kobilje	A		
3	Loški Potok	A	B	D
4	Nazarje	A	D	
5	Odranci			
6	Radeče	A		
7	Škocjan	A	D	B
8	Vitanje	A		
<i>B MLC</i>				
9	Beltinci	A		
10	Črenšovci	A		
11	Grosuplje	A	B	
12	Lendava	A	B	C
13	Logatec	A	H	B
14	Mozirje	A		
15	Radlje ob Dravi	A	D	C
16	Ribnica	A	D	C
17	Šentjernej	A	C	B
18	Vojnik	A	E	C
<i>C LLC</i>				
19	Jesenice	A	D	B
20	Krško	A	D	C
21	Ljutomer	A	I	J
22	Murska Sobota	A	B	D
23	Novo Mesto	A	C	B
24	Slovenj Gradec	A		
25	Trebnje	A	D	B
26	Tržič	A	B	I

A – lack of financial resources

B – project documentation not ready

C – inadequate state-local community relationship (legislation)

D – infrastructure ownership problems

E – allocation of assets and liabilities among local communities not completed

F – restitution problems

G – lack of co-financing from other local communities

H – lack of political will

I – priority to other investments

J – inadequate cooperation with individual consumers of communal infrastructure services

Source: Agency for Payments database.

Table A.2.11 Communal Infrastructure Investment Plans for 1998–2002: Sources of Funds

No.	Local community	Provider of services	Local community budget	Water pollution tax	State budget	Community members financial participation	Eco Fund	Domestic commercial credits	Foreign commercial credits	Other	Total
A SLC											
1	Gornji Grad	3.2	12.5	12.7	63.0	0.0	34.7	0.0	100.0	120.6	346.7
2	Kobilje	0.0	11.0	4.0	116.0	15.0	10.0	0.0	75.0	0.0	231.0
3	Loški Potok	15.5	141.5	8.0	322.0	0.0	0.0	0.0	0.0	0.0	487.0
4	Nazarje	1.5	43.4	11.0	34.0	0.0	1.6	0.0	0.0	1.5	93.0
5	Odranci	3.0	11.0	0.0	34.0	7.0	0.0	0.0	0.0	0.0	55.0
6	Radeče	0.0	131.0	9.0	120.0	0.0	0.0	0.0	0.0	0.0	260.0
7	Škocjan	51.0	70.9	3.0	28.0	26.0	20.0	0.0	183.0	0.0	381.9
8	Vitanje	0.0	50.0	140.0	230.0	0.0	0.0	0.0	130.0	158.0	608.0
Total A		74.2	471.3	187.7	947.0	48.0	66.3	0.0	488.0	180.1	2,462.6
B MLC											
9	Beltinci	35.0	406.0	0.0	457.0	30.0	146.0	190.0	0.0	365.0	1,629.0
10	Crenšovci	0.0	382.0	0.0	218.0	382.0	179.0	0.0	0.0	0.0	1,161.0
11	Grosuplje	437.0	273.0	143.5	161.0	0.0	47.7	3.6	0.0	73.3	1,139.1
12	Lendava	5.0	450.0	75.0	150.0	29.0	10.0	648.0	0.0	97.0	1,464.0
13	Logatec	30.0	286.0	50.0	102.0	0.0	50.0	0.0	0.0	41.0	559.0
14	Mozirje	9.0	95.0	39.0	44.0	0.0	10.0	0.0	0.0	20.0	217.0
15	Radlje ob Dravi	65.0	248.0	0.0	341.0	0.0	0.0	0.0	0.0	0.0	654.0
16	Ribnica	84.0	284.0	82.0	250.0	0.0	0.0	0.0	0.0	0.0	700.0
17	Senjernerj	138.1	218.0	0.0	27.5	11.0	81.0	85.5	0.0	0.0	561.1
18	Vojnik	0.0	278.8	159.5	270.1	117.5	0.0	0.0	0.0	105.5	931.4
Total B		803.1	2,920.8	549.0	2,020.6	569.5	523.7	927.1	0.0	701.8	9,015.6
C LLC											
19	Jesenice	505.5	135.0	0.0	102.8	0.0	90.0	0.0	0.0	270.4	1,103.7
20	Krško	...	...	...	...	...	...	...	...	...	...
21	Ljutomer	322.0	700.0	75.0	667.0	100.0	160.0	0.0	0.0	0.0	2,024.0
22	Murska Sobota	300.0	259.0	225.0	155.0	178.0	80.0	120.0	0.0	1,820.0	3,137.0
23	Novo Mesto	1,153.1	680.9	0.0	554.0	0.0	340.7	0.0	1,318.3	119.0	4,166.0
24	Slovenj Gradec	180.0	849.0	200.0	460.0	0.0	0.0	0.0	555.0	0.0	2,244.0
25	Trebnje	44.1	541.8	0.0	903.0	15.5	142.3	132.2	0.0	27.1	1,806.0
26	Tržišče	60.0	334.0	178.0	75.0	0.0	75.0	0.0	66.0	0.0	788.0
Total C		2,564.7	3,499.7	678.0	2,916.8	293.5	888.0	252.2	1,939.2	2,236.5	15,268.7
Total A + B + C		3,442.0	6,891.8	1,414.7	5,884.4	911.0	1,478.0	1,179.3	2,427.3	3,118.4	26,746.9

... Negligible

Source: Agency for Payments database.

Table A.2.12 Communal Infrastructure Investment Plans for 1998–2002: Which of the Financial Sources is Considered Least Reliable

No	Local community	Which of the financial sources is considered as least reliable
A SLC		
1	Gornji Grad	
2	Kobilje	
3	Loški Potok	A
4	Nazarje	A
5	Odranci	A
6	Radeče	A
7	Škocjan	C
8	Vitanje	
B MLC		
9	Beltinci	
10	Črenšovci	A
11	Grosuplje	A
12	Lendava	A, E
13	Logatec	A
14	Mozirje	A
15	Radlje ob Dravi	A
16	Ribnica	A
17	Šentjernej	C
18	Vojnik	A
C LLC		
19	Jesenice	D, A
20	Krško	B
21	Ljutomer	
22	Murska Sobota	A
23	Novo Mesto	C
24	Slovenj Gradec	A
25	Trebnje	A, D, E
26	Tržič	A

A – transfers from the budget

B – credits from Eco – fund

C – credits from international financial institutions

D – retained earnings (amortization)

E – community members financial participation

Source: Agency for Payments database.

Table A.2.13 Communal Service Providers and their Expected Role in Financing 1998–2002
Communal Infrastructure Plans
From 1–not important to 5–very important

No.	Local community	Does service provider plan to invest more than in recent years?		If yes, why?		
		Yes	No	Expected price liberalization	Expected increase in the volume of services	Expected improvement in operational efficiency
A SLC						
1	Gornji Grad	X		3	5	4
2	Kobilje		X			
3	Loški Potok		X			
4	Nazarje		X			
5	Odranci		X			
6	Radeče		X			
7	Škocjan	X		5	2	5
8	Vitanje					
Average A				4.0	3.5	4.5
B MLC						
9	Beltinci		X			
10	Črenšovci					
11	Grosuplje	X		3	4	4
12	Lendava	X		5	5	5
13	Logatec	X		5	5	4
14	Mozirje	X		5	4	4
15	Radlje ob Dravi		X			
16	Ribnica		X			
17	Šentjernej	X		5	2	5
18	Vojnik	X		4	5	4
Average B				4.5	4.2	4.3
C LLC						
19	Jesenice	X		5	2	3
20	Krško	X		5	3	3
21	Ljutomer		X			
22	Murska Sobota	X		5	1	3
23	Novo Mesto	X		5	2	5
24	Slovenj Gradec	X		5	3	3
25	Trebnje	X		2	2	3
26	Tržič	X		5	1	3
Average C				4.6	2.0	3.3
Average Total A + B + C				4.5	3.1	3.9

Source: Agency for Payments database.

Table A.2.14 State Budget and its Expected Role in Financing 1998–2002 Communal Investment Plans

No.	Local community	Do you plan to receive transfers from state budget?		In comparison to recent years, these transfers are expected to be			
		Yes	No	Lower	At the same level	Up to 20 percent higher	More than 20 percent higher
A SLC							
1	Gornji Grad	X				X	
2	Kobilje	X					X
3	Loški Potok	X					X
4	Nazarje	X				X	
5	Odranci	X					X
6	Radeče	X					X
7	Škocjan	X					X
8	Vitanje	X					X
B MLC							
9	Beltinci	X					X
10	Črenšovci	X					X
11	Grosuplje	X					X
12	Lendava	X		...	...	...	...
13	Logatec	X				X	
14	Mozirje	X					X
15	Radlje ob Dravi	X					X
16	Ribnica	X					X
17	Šentjernej	X					X
18	Vojnik	X					X
C LLC							
19	Jesenice	X				X	
20	Krško	X					X
21	Ljutomer	X					X
22	Murska Sobota	X			X		
23	Novo Mesto	X					X
24	Slovenj Gradec	X					X
25	Trebnje	X					X
26	Tržič		X				

... Negligible.

Source: Agency for Payments database.

Table A.2.15 Main Patterns of Credits to be Raised for Financing 1998–2002 Communal Investment Plans

No.	Local community	Preferred type of credits			Preferred currency		Preferred interest rate	
		Long-term	Medium-term	Short-term	SIT	Foreign	Fixed	Variable
<i>A SLC</i>								
1	Gornji Grad	X			X			X
2	Kobilje	X			X		X	
3	Loški Potok		X		X			X
4	Nazarje		X		X		X	
5	Odranci	X			X		X	
6	Radeče	X			X		X	
7	Škocjan	X			X		X	
8	Vitanje	X			X		X	
<i>B MLC</i>								
9	Beltinci	X			X		X	
10	Črenšovci	X			X		...	...
11	Grosuplje	X			X		X	
12	Lendava	X			X			X
13	Logatec	X			X		X	
14	Mozirje	X			X		X	
15	Radlje ob Dravi	X			X		X	
16	Ribnica			X	X		X	
17	Šentjernej	X			X		X	
18	Vojnik			X	X			X
<i>C LLC</i>								
19	Jesenice	X				X	X	
20	Krško			X	X		X	
21	Ljutomer		X		X		X	
22	Murska Sobota		X		X		X	
23	Novo Mesto	X			X		X	
24	Slovenj Gradec	X			X			X
25	Trebnje			X		X	X	
26	Tržič		X		X		X	

... Negligible.

Source: Agency for Payments database.

Table A.2.16 Importance of Individual Factors in Picking Up a Creditor for Communal Investment From 1—not important to 5—very important

No.	Local community	Interest rate	Accessibility of credit	Creditor's efficiency at work	Reliability of a creditor	Type of financial investments a creditor provides	Other services offered by a creditor
<i>A SLC</i>							
1	Gornji Grad	5	4	5	5	5	5
2	Kobilje	5	4	5	5	4	4
3	Loški Potok	5	3	4	5	3	4
4	Nazarje	5	2	2	4	4	4
5	Odranci	5	...	3	...	3	5
6	Radeče	5	5	5	5	5	5
7	Škocjan	5	5	4	5	5	4
8	Vitanje	5	4	5	5	5	5
Average A		5.0	3.9	4.1	4.9	4.3	4.5
<i>B MLC</i>							
9	Beltinci	5	3	3	3	4	4
10	Črenšovci	5	4	...	5	4	3
11	Grosuplje	5	4	5	5	3	2
12	Lendava	5	5	4	5	4	4
13	Logatec	5	4	3	5	3	3
14	Mozirje	5	4	4	3	...	...
15	Radlje ob Dravi	5	5	5	5	5	5
16	Ribnica	5	5	5	5	5	5
17	Šentjernej	5	5	4	5	5	4
18	Vojnik	4	5	4	5	4	4
Average B		4.9	4.4	4.1	4.6	4.1	3.8
<i>C LLC</i>							
19	Jesenice	5	3	3	1	1	1
20	Krško	2	4	5	5	3	2
21	Ljutomer	5	3	5	3	3	1
22	Murska Sobota	4	5	5	4	4	4
23	Novo Mesto	5	5	4	5	5	4
24	Slovenj Gradec	5	5	5	5	5	5
25	Trebnje	5	4	4	4	4	3
26	Tržič	5	1	2	5	3	2
Average C		4.5	3.8	4.1	4.0	3.5	2.8
Average total A + B + C		4.8	4.0	4.1	4.5	4.0	3.8

... Negligible.

Source: Agency for Payments database.

Table A.2.17 Which Creditor Would You Prefer at Equal Cost of Financing
From 1–least preferred to 5–most preferred

No.	Local community	Eco Fund	Local commercial banks	Foreign commercial banks in Slovenia	International financial institutions	Foreign commercial banks with headquarters abroad
<i>A SLC</i>						
1	Gornji Grad	5	1	3	4	2
2	Kobilje	5	3	2	4	1
3	Loški Potok	2	5	4	1	3
4	Nazarje	5	3	2	4	1
5	Odranci	5	3	4	2	1
6	Radeče	5	4	...	...	...
7	Škocjan	5	4	2	3	1
8	Vitanje	5	3	3	5	3
Average A		4.6	3.3	2.9	3.3	1.7
<i>B MLC</i>						
9	Beltinci	4	3	3	3	2
10	Črenšovci	...	...	...	...	...
11	Grosuplje	5	4	3	2	1
12	Lendava	4	5	3	2	1
13	Logatec	5	4	2	3	1
14	Mozirje	5	4	3	2	1
15	Radlje ob Dravi	5	3	2	4	1
16	Ribnica	...	...	...	...	...
17	Šentjernej	5	4	2	3	1
18	Vojnik	4	5	2	3	1
Average B		4.6	4.0	2.5	2.8	1.1
<i>C LLC</i>						
19	Jesenice	4	5	3	2	1
20	Krško	4	5	2	3	1
21	Ljutomer	4	5	2	3	1
22	Murska Sobota	4	5	2	3	1
23	Novo Mesto	5	4	2	3	1
24	Slovenj Gradec	5	4	3	1	2
25	Trebnje	4	3	2	5	1
26	Tržič	5	4	3	2	1
Average C		4.4	4.4	2.4	2.8	1.1
Average total A + B + C		4.5	3.9	2.6	3.0	1.3

... Negligible.

Source: Agency for Payments database.

Table A.2.18 Private Investors and their Expected Role in Financing 1998–2002 Communal Investment Plans

No.	Local community	Are you interested in this form of financing?		If yes, why?			Main obstacles for this form of financing			
		Yes	No	Lack of financial resources	Better quality of services	Other	Lack of business interest	Poor understanding of the concept	Inadequate legislation	Ownership problems
A SLC										
1	Gornji Grad	X		X	X		X	X	X	
2	Kobilje	X		X	X			X		X
3	Loški Potok	X		X						X
4	Nazarje	X			X		X			X
5	Odranci	X			X		X		X	X
6	Radeče		X					X	X	X
7	Škocjan		X				X	X		X
8	Vitanje	X		X				X	X	X
B MLC										
9	Beltinci	X		X					X	X
10	Črenšovci	X		X				X		
11	Grosuplje		X				X		X	X
12	Lendava	X		X	X				X	X
13	Logatec	X		X	X		X		X	X
14	Mozirje	X		X			X			
15	Radlje ob Dravi	X		X						
16	Ribnica	X		X					X	X
17	Šentjernej		X				X	X	X	X
18	Vojnik	X		X	X		X	X	X	X
C LLC										
19	Jesenice		X						X	X
20	Krško	X		X	X			X	X	X
21	Ljutomer		X					X	X	X
22	Murska Sobota	X		X				X	X	X
23	Novo Mesto	X					X		X	X
24	Slovenj Gradec	X		X				X		X
25	Trebnje	X		X	X		X	X	X	X
26	Tržič		X					X	X	X

Source: Agency for Payments database.

Bibliography and Sources

- Ministry of Finance. Various years. *Governmental Accounts*. Ljubljana, Slovenia (various numbers).
- Poland and Hungary Assistance for Economic Restructuring Programme (PHARE). 1998. *Development of a Costing Assessment for the Slovenian Environmental Approximation Strategy*. February. Brussels: PHARE.
- Kelvišar, Marjan. 1998. Public Sector and its Role in Financing New Infrastructure Projects. Svetovalni Center, Ljubljana. Paper presented at the seminar, in Slovenian language.
- Mrak, Mojmir. 1997. "Infrastructure Investment Needs in Slovenia." *IB Revija* (Ljubljana) 31(12): pp. 9–33.
- Economic Commission for Europe and United Nations. 1997. *Slovenia: Environmental Performance Review*. Geneva and New York: Economic Commission for Europe and United Nations
- Foreign Investment Advisory Service. 1997. *Slovenia: Private Investment in the Infrastructure of the Republic of Slovenia*. Washington, D.C.
- Private Sector* (Washington) various numbers.
- Poland and Hungary Assistance for Economic Restructuring Programme (PHARE). 1998. *Revision of Slovenian Environmental Legislation*. May. Brussels: PHARE.
- Simoneti, Marko, Matija Rojec, and Marko Rems. 1998. Enterprise Sector Restructuring and EU Accession in Slovenia. Processed. Washington, D.C.: The World Bank.
- Svetovalni Center. 1997. *Strategy of the Communal Sector Development in the Republic of Slovenia*. Ljubljana. In Slovenian language.
- Institute of Macroeconomic Analysis and Development. 1998. *Spring Report 1998*. Ljubljana.
- European Bank for Reconstruction and Development (EBRD). 1996. *Transition Report 1996: Infrastructure and Savings*. London.
- The World Bank. 1994. *World Development Report 1994: Infrastructure for Development*. Washington, D.C.

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