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WBI Learning Resources Series

Subnational Data Requirements for Fiscal Decentralization

Case Studies from Central and Eastern Europe

Edited by
Serdar Yilmaz
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Foreword

After a decade of decentralization reforms in the transition economies, subnational governments in Central and Eastern European countries are now responsible for the delivery of local services. Underlying the hopes and plans for the devolution of responsibilities for local services to local governments are a series of assumptions about the availability, adequacy, and use of statistical data, both locally and nationally, needed for local officials to make informed policy choices. The legacy of the region's communist past is an ambitious information system rooted in the centralized economy, but social statistics were not used for purposes of governance. Such an approach becomes less acceptable as economic issues become more complex and as political imperatives support increasingly democratic forms of governance in which people's needs must be taken into account in the design of policy options, and where information systems must provide the kind of data that allow policymakers and citizens to assess the outcomes of policy choices.

The need for subnational demographic, social, economic, and fiscal data in designing effective intergovernmental fiscal systems is becoming increasingly evident. It is not unusual for international agencies or researchers to request basic information about social issues, such as population, school enrollment, poverty levels, or infant mortality, on the assumption that these figures are available for localities (subdistricts, districts, municipalities, and so on). They are surprised to find that systems to produce such figures do not exist, and their surprise turns to dismay when they are informed that local governments do not even have information about the socioeconomic characteristics of their jurisdictions, for example, how many people live in their jurisdictions, what their revenue base is, or what their expenditure needs are.

The World Bank Institute, the Organisation for Economic Co-operation and Development, and the Economic Development Center of the Soros Foundation have launched a program on subnational statistical capacity building with the aim of strengthening national statistical systems' ability to collect subnational statistics. This book summarizes the findings of needs assessment activities in five demonstration countries that are at different stages of fiscal decentralization: Bulgaria, Romania, the Slovak Republic, Slovenia, and Ukraine. We are pleased to make this volume available to all who are interested in intergovernmental fiscal reform issues in Central and Eastern Europe.

Frannie A. Léautier
Vice President
World Bank Institute

Abbreviations and Acronyms

CCI	Chamber of Commerce and Industry (Romania)
COFOG	classification of the functions of government (Slovenia)
COP	Country Operational Program
CSO	county statistical office
ESS	European Statistical System
EU	European Union
GDP	gross domestic product
GDPF	General Department of Public Finance (Romania)
IMF	International Monetary Fund
InterISPO	decision support information system (Slovenia)
LGU	local government unit
LO	labor office
MDGs	Millennium Development Goals
MES	Ministry of Education and Science (Bulgaria)
MLSP	Ministry of Labor and Social Policy
MLSS	Ministry of Labor and Social Solidarity (Romania)
MOF	Ministry of Finance
MPA	Ministry of Public Administration (Romania)
MPF	Ministry of Public Finance (Romania)
MPWTH	Ministry of Public Works, Transportation, and Housing (Romania)
MSASs	Municipal Social Assistance Services
NAMRB	National Association of Municipalities in the Republic of Bulgaria
NIS	National Institute of Statistics (Romania)
NPSS	National Program of Statistical Surveys (Slovenia)
NSAS	National Social Assistance Service (Bulgaria)
NSI	National Statistical Institute
NUTS	Nomenclature of Territorial Units for Statistics (Slovak Republic)
OECD	Organisation for Economic Co-operation and Development
PHARE	Poland and Hungary Assistance for Economic Restructuring
PHARE-COP98	Poland and Hungary Assistance for Economic Restructuring Country Operational Program (Slovenia)
PIT	personal income tax
RDC	regional development council (Romania)
RSO	regional statistical office
RTO	regional tax office
SWOT	strengths, weaknesses, opportunities, and threats (Slovenia)
TMS-TIS	town and municipality statistics and town information system (Slovak Republic)
UN	United Nations

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Implementing Fiscal Decentralization: Data Needs and Availability

Serdar Yilmaz, Jozsef Hegedus, and Michael E. Bell

Poverty is an outcome of interaction between economic, social, and political forces. The World Bank has emphasized poverty reduction in its programs and operational activities. With the launching of initiatives such as the poverty reduction strategy papers and the Comprehensive Development Framework, it has made considerable progress in integrating antipoverty programs into other lending operations.

As mentioned in the *World Development Report 2000/2001, Attacking Poverty* (World Bank 2001b), poverty has many dimensions. It is not defined only by income, but also has political and sectoral (access to services) dimensions. Today, in most countries subnational governments are responsible for the delivery of services that affect these dimensions of poverty. Because subnational governments control increasingly higher shares of total public resources, their competence in designing public policies and delivering public services becomes crucial in influencing the level of poverty. Indeed, the literature on fiscal decentralization presents evidence that local services, especially health and education, are highly correlated with the incidence of poverty (Bird and Rodriguez 1999). In this context, the need for subnational demographic, social, economic, and fiscal data is becoming more evident at a time when subnational governments are involved in national and global objectives of poverty reduction. Statistical capacity building at the subnational level aims to help statistical offices and subnational governments produce the basic microdata necessary not only for monitoring progress in poverty reduction, but also for ex ante policy formulation by subnational governments.

Strengthening subnational data collection capacity is crucial in the design of a successful development strategy as both an analytical and organizational tool. Analytically, compilation of data on demographic, social, economic, and fiscal indicators informs central governments of the tasks ahead, especially in designing an effective intergovernmental system, while at the same time allowing the quantification of regions' specific needs for assistance. Organizationally, the compilation of subnational datasets would allow the central government to monitor local governments' achievement of national policy objectives of reducing poverty and increasing living standards.

For decades, one conventional approach to poverty reduction was to emphasize economic growth and development in the belief that benefits would eventually "trickle down" to the poor. Although such an assumption was not altogether mistaken, the so-called trickle-down approach to development brought with it some unanticipated consequences, including uneven development and inequitable distribution of wealth, resources, and benefits to various sectors of the society, especially the poor. Recently, however, the international community concluded that poverty is multidimensional, extending beyond low levels of income, and is a deprivation of well-being (World Bank 2001b). Different dimensions of poverty include

- *Lack of opportunity:* Low levels of consumption and income generally associated with the level and distribution of human capital, social assets, and physical assets (such as land)
- *Low capabilities:* Lack of access to education, health, and nutrition

- *Low levels of security:* Exposure to risk and income shocks
- *Lack of empowerment:* Low capability to participate in decisionmaking, to negotiate policy options, to hold accountable institutions that affect well-being.

Therefore the notion of poverty includes vulnerability and exposure to risk. Nobel Laureate Amartya Sen argues that

> There is good reason for seeing poverty as a deprivation of basic capabilities, rather than merely as low income. Deprivation of elementary capabilities can be reflected in premature mortality, significant undernourishment (especially of children), persistent morbidity, widespread illiteracy and other failures (Sen 1999, p. 20).

In alleviating poverty, nowhere is the issue of accountability and responsiveness of state institutions more critical than at the local government level. Local governments provide the goods and services that directly affect the daily lives of all citizens. Local governments generally provide primary and secondary education, primary health care, transportation infrastructure, water and wastewater services, solid waste collection and disposal, and other goods and services.

In this context, fiscal decentralization may be viewed as a critical tool in a comprehensive strategy to alleviate poverty. Pursuit of a fiscal decentralization strategy has two dimensions. First is the issue of creating the institutions necessary for a system of fiscal decentralization. Much work has been done in this regard over the last decade or so and much has been learned. Second is a need to put in place those structures necessary to make the institutions work properly. Policymakers have paid less attention to identifying and strengthening structures that would create enabling environment for decentralization, but they will become increasingly important as attention shifts from creating fiscal decentralization institutions to consolidating those changes and ensuring they work adequately to realize the perceived benefits of fiscal decentralization.

One factor necessary for a fiscal decentralization scheme to realize its full potential is that decisionmakers at the local government level must have adequate information to make policy decisions and allocate limited resources most effectively. This issue is critical, because decentralization of the public sector has been one of the fundamental elements of change during the transition in Central and Eastern Europe. During the last 10–12 years, each country in the region introduced a decentralized system of government, in which the elements of the administrative, fiscal, and political decentralization moved the public administration toward a more efficient and democratic system. Slovenia seems to be an exception. It moved from an extremely decentralized (and nontransparent) fiscal system, a so-called "socialist self-managed system," toward a centralized system in the early 1990s, because the central government thought that centralization was the only way to maintain tight fiscal control to assure macroeconomic stability. Then the question becomes what kind of decentralization did the socialist self-management system represent.

The process has not yet been completed. In some countries political decentralization is blocked by the main political forces for fear that the political elite could lose control over a large part of the public sector. In other countries, even if legal conditions for political decentralization are in place, different elements of the fiscal system limit the real autonomy of subnational governments. Several other constraints also hinder decentralization, such as the lack of management capacity in subnational governments, countries' macroeconomic problems, badly designed expenditure and revenue assignments, and so forth.

Among these factors, the lack of subnational statistics plays an important role. Without proper information, intergovernmental fiscal relations will necessarily involve conflicts both between the different levels of subnational government and local governments at the same level. Without relevant statistical information, the subnational government cannot, for example, form policy on areas that fall under their jurisdiction.

Subnational Statistical Capacity Building Project

The World Bank Institute, the Organisation for Economic Co-operation and Development, and the Economic Development Center in Romania (the Soros Foundation) launched a joint program to strengthen evidence-based policymaking at the subnational level in countries experimenting with fiscal decentralization. Five demonstration countries were selected to represent different stages of or approaches to fiscal decentralization: Bulgaria, Romania, the Slovak Republic, Slovenia, and Ukraine.

The aim of this joint program is to increase countries' analytical capacity to collect subnational-level demographic, social, economic, and fiscal data and to use them in designing policies to address regional disparities. The components of the program are designed as a systematic, logical whole as follows:

- *Country needs assessment activities.* These include interactions with all stakeholders in assessing the needs of users, especially policymakers, the private sector, and society in general; setting priorities, including balancing the long-term need to build statistical capacity with the short-term need for data; and assessing resource requirements and making better use of available resources by addressing the entire national statistical system and not just the national statistical office.
- *Regional seminar for targeted staff.* Building country ownership of the statistical system is an important component of a sustainable program to build statistical capacity. Governments that value effective policymaking by using statistical data are more likely to invest in statistical capacity building. A regional seminar brings senior officials from the central and local authorities and from national statistics institutes from the participating countries to discuss the importance of subnational data for planning, monitoring, and policymaking.
- *Action plan development.* Producing statistics requires resources. Unfortunately, resources are becoming scarcer while the demand for data continues to increase. To meet this demand, the action plan should provide a comprehensive framework in taking further steps to establish subnational statistics database based on the issues identified in the country needs assessment activities.

The World Bank Institute identified a partner organization in each country to carry out the project activities. As a first step in the project, each in-country partner organization prepared a needs assessment study that undertook a general reconnaissance of data availability and use at the local government level and examined ways to improve data availability as local governments take on more policymaking responsibility. Each group then organized a workshop at which major stakeholders at the national and subnational level reacted to the findings.

This volume summarizes the findings of those initial reconnaissance efforts and conclusions from the workshops with key stakeholders. The needs assessment report of each partner organization follows a standard format that includes the following four sections: the current status and extent of fiscal decentralization and the importance of subnational statistics in general, the current practices and extent of use of statistical data by subnational governments, the current state of subnational statistics, and the impediments facing subnational statistics collection. The original reports are available on the project Web site at http://www.worldbank.org/wbi/publicfinance/decentralization/statistics.html.

Based on the needs assessment activities and consultations with the stakeholders, in-country partners prepared action plans to build a comprehensive operational proposal for further steps in the development of subnational statistics in their countries. The common theme of the action plans across countries is the need to increase not only the supply of statistical data, but also the

demand for applications that use statistical data. Low exploitation of available statistical data originating from low statistical capacity of potential data users undermines statistics collection efforts, which in turn has a negative impact on the quality of statistics. While the poor quality of statistics leads to a lower demand for statistics, it also aggravates governmental policymaking, planning, and administration problems. Therefore action plans link the supply and demand elements of a successful statistical capacity building program as follows:

- *Building country demand.* One of the most important factors in increasing the demand for subnational data is to build country ownership of the statistical system. Governments that recognize the value of effective and efficient statistical systems at the national and local levels are more likely to invest in statistical capacity building. Incorporating statistical data in policymaking and disseminating data to the public and private sectors are important factors in boosting the ownership of statistical systems.
- *Undertaking strategic planning.* To allocate scarce resources for a costly project, such as statistical infrastructure improvements, there is a need for innovation and better planning, in particular, the creation of a strategic statistical master plan. This master plan aims to develop a long-term, coordinated, and coherent statistical service in tandem with the national development framework. This includes
  - Assessing the needs of users, especially policymakers, the private sector, and society in general
  - Setting priorities, including balancing the long-term need to build statistical capacity with the short-term need for data
  - Assessing resource requirements and making better use of available resources by addressing the entire national statistical system and not just the national statistical office
  - Passing enabling legislation that ensures the independence of statistical production
  - Fostering professional standards, developing cost-effective methodologies, and promoting best practice.
- *Providing training in new tools for data collection.* Statistical processes and tools, perhaps more than anything else, lend themselves to broad applications, often with only minor regional or country adaptation. Data collection activities are not cheap—especially large-scale surveys and censuses—and many of them must be paid for from government budgets already under considerable strain. Thus the use of proven methodology and tools developed by the World Bank and other agencies is both cost saving and cost-effective and many countries could be helped to take advantage of these opportunities.
- *Making better use of existing data.* Statistical applications are indispensable tools for policymaking in democratic societies. They serve governments, economic systems, and the general public by providing data about a country's demographic, economic, and social makeup. The basic objective of producers of social statistics is to support decisionmaking, policies, and programs at various levels of government, the private sector, and academia. Training programs designed to enhance capacity can increase the utilization of available data by policymakers. Such programs should provide data users at national and subnational levels with a broad base of contemporary knowledge in the use of data for better policymaking and public management.
- *Linking data to policy outcomes.* Statistical indicators provide a framework for good governance. Without such data governments would be operating blindly, by instinct, with all the implications this has had for wasted resources and policy errors that can take years, or even decades, to rectify. A good statistical system allows a government to report back to the people on the progress of its polices and empowers the people to judge the government's success or otherwise. In other words, it is a key factor in making a government transparent

and accountable. If governments are seen to be using the best available data on the state of the nation for both short- and long-term policymaking, they are far more likely to command public support for their actions.

- *Funding investments in statistics.* Financing the activities of the national statistical system is essentially each country's own responsibility, and funds should be allocated from the national budget. The ability to provide regular, reliable data on the economy and on the population's well-being is an important indicator of country commitment for better policymaking, transparency, and accountability. Disseminating good data increases transparency and promotes accountability. It also complements important processes such as budget management and auditing. Therefore countries that commit themselves to meaningful improvements in statistical systems, accompanied by well thought out plans and commitment at the highest level of government, should receive increased support from the World Bank and others.
- *Assisting international cooperation.* In general, better coordination between international organizations and countries' statistical offices help to a well-harmonized, internationally agreed set of data that are up-to-date, easily accessible, and complete with metadata and other documentation. The coordination of the statistical activities of the United Nations (UN) and its specialized agencies, such as the UN Educational, Scientific, and Cultural Organization and the World Health Organization, and other international organizations, such as the International Monetary Fund (IMF) and the World Bank, takes place in a number of forums, with the UN Statistical Commission being the highest governing body.

Decentralization and Subnational Statistics

The five countries selected are at different stages of decentralization. Each country has a unitary system with multiple levels of governments. In a recent study (World Bank 2001a) the Slovak Republic and Slovenia were characterized as members of the group of "keen decentralizers," and Bulgaria, Romania, and Ukraine were characterized as "uncertain decentralizers." Basic structures—although still in the process of evolving—are in place in the keen decentralizers, and the decentralization strategy is influenced by their upcoming European Union (EU) accession. In the case of the uncertain decentralizers the emphasis is on improving the systems of intergovernmental finance; the administrative reforms; and the legal and regulatory frameworks, which are less developed. Also the elements necessary to support accountability need further improvement.

The process of decentralization has been accelerated in the last few years in Bulgaria, Romania, and Ukraine, and important changes have been introduced into intergovernmental fiscal relations. These societies are undergoing major reforms in the public sector, but even in countries labeled keen decentralizers, no consensus has been reached about the most effective way to decentralize. One of the constraints to effective decentralization, beyond the lack of political will, is the lack of capacity to restructure the public sector both at the central and local levels. The insufficiency of subnational statistical information slows down the process, because of the inevitable risk of introducing changes without the proper feasibility and impact studies.

In the countries selected for this project, the important factor in the process of decentralization was the degree of autonomy to formulate and execute public policy at the subnational level. Even in a well-established legal system, or in countries where decentralization started right after the changes in the regime, public sector decisions can be centrally dominated, leaving little or no room for local decisions. Actual autonomy depends largely on the ability to access relevant information and on the capacity to use it for policy formulation and program management.

The structure and size of subnational units differ in the transition countries. For example, the data in table 1.1 indicate that Bulgaria, with a population of almost 8 million people, has 262 local

Table 1.1 *Characteristics of Decentralization, Selected Countries*

Trait	*Bulgaria*	*Romania*	*Slovak Republic*	*Slovenia*	*Ukraine*
Population (number of people)	7,940,000	22,533,156	5,402,547	1,988,000	48,400,000
Regional governments	28 districts (deconcentrated units of the central government)	41 counties	8 regions	None	27 *oblasts*, 490 *rayons*
Local governments	262 municipalities	2,951 local governments	2,879 municipalities	192 local governments	451 local governments, thousands of settlements and villages
Average size of lowest level of local governments (number of inhabitants)	30,000	3,777	1,877	10,366	4,066

Source: Country chapters.

governments with an average size of approximately 30,000 inhabitants, whereas the Slovak Republic, with fewer than 5.5 million inhabitants, has 2,879 local governments with an average size of approximately 1,877 inhabitants. This difference illustrates one of the problems most of the countries face: the size of the lowest level of local governments. The extreme example is the Slovak Republic, but Romania and Slovenia also have local governments that are much smaller than the "optimal" size. Small local governments often lack the capacity to manage all the functions assigned to them, and the need for more autonomy has not been realized by the local elected officials (see chapter 4, Romania). Smaller governments, by contrast, may lead to greater participation and accountability and may be politically desirable. In Bulgaria, for example, the "optimum" size of local governments represents an amalgamated structure in which several settlements belong to one local government without the proper right of autonomy.

The process of decentralization is far from being finished. For example, data in table 1.2 indicate that local expenditures in 2000 account for only 6.7 percent of total public expenditures in the Slovak Republic, 10.3 percent in Romania, and 12.0 percent in Slovenia. As chapter 5 (the Slovak Republic) describes, the process of decentralization has recently accelerated in the Slovak Republic. Significant changes in service delivery and revenue-raising responsibilities were started in January 2002, and the process of decentralization will evolve over the next two years. One of the key issues during this time will be how to reconcile new municipal responsibilities for service delivery and revenue raising with the role of regional and district offices, which are subordinate to the central government. In essence, the challenge is moving from one system of local governance to another.

The process of decentralization is still evolving in Ukraine as well. As chapter 7 (Ukraine) describes, even though current legislation provides a reasonable framework for a decentralized system of service delivery and local own-source revenues, in practice, the system of public governance and finance in Ukraine is still highly centralized. All stakeholders seem to accept the need to move toward administrative decentralization, but local autonomy has not yet been implemented,

Table 1.2 *Public Sector Size, Selected Countries, 1998–2000*

	Bulgaria			*Romania*			*Slovak Republic*			*Slovenia*			*Ukraine*[a]		
Revenues and expenditures	*1998*	*1999*	*2000*	*1998*	*1999*	*2000*	*1998*	*1999*	*2000*	*1998*	*1999*	*2000*	*1998*	*1999*	*2000*
Tax revenues (percentage of GDP)	27	27	29	26	27	27	32	30	31	37	38	37	21	22	23
Local public expenditure (percentage of total public expenditure)	19.1	18.8	17.7	9.0	9.5	10.3	7.7	7.0	6.7	11.4	11.6	12.0	48.1	45.4	35.3
Local public expenditure (percentage of GDP)	8.0	8.0	8.0	2.9	3.3	3.5	3.3	2.8	2.8	5.0	5.1	5.3	14.5	12.4	9.8
US$ per capita (PPP, current international prices)	4,964	5,198	5,710	6,214	6,298	6,540	10,225	10,732	11,243	15,055	16,216	17,333	3,366	3,489	3,818

GDP gross domestic product.
PPP purchasing power parity.
a. Figures for Ukraine are for deconcentrated units, therefore they do not necessarily represent percentage shares of local self-government units (see chapter 7).
Source: International Monetary Fund (2001); World Bank (2003).

in large part because of the lack of resources at all levels of subnational government to undertake the service delivery and revenue-raising responsibilities implied by decentralization.

Even when service delivery responsibilities are given to municipalities, the central government often maintains control over key decisions. For example, in Bulgaria local governments have been given increased responsibility in the areas of education, health care, and social assistance, but the central government maintains control over setting wages and determining the number of staff in schools and hospitals and also appoints the directors of hospitals and schools. This division of power represents an interim step in the process of shifting service delivery responsibility from the central government to municipalities.

The most important constraint to autonomy is the subordination of the executive part of the organization to the central administration. This question is one of political decentralization, which is the key to efficient decentralization. In some countries, for example, Ukraine, the executive part of local administration is headed by appointed leaders; in other countries budget preparation is fully controlled by the central government, leaving less room for autonomous decisions at subnational level. Thus even in the case of political decentralization, the control over subnational units could be substantial through responsibilities and revenue assignment.

Finally, in one of the sample countries, Slovenia, the system of governance has actually become somewhat more centralized since the changes of 1990 than it was under the previous system. Although some might consider the swing of the fiscal pendulum toward centralization somewhat excessive, to a certain extent it was necessitated by the central government's desire to maintain a tight fiscal grip to ensure macroeconomic stabilization. Since 1992, however, the central government has not shown any desire to loosen its fiscal grip, as demonstrated by the fairly low and stable share of local finances in general government finances (between 11 and 12 percent of total general expenditures) and the stalemate in the legal preparations for establishing an intermediate level of government.

As decentralization continues to evolve in the region, a need for an efficient middle level of local government develops. In recent years a number of countries, especially, but not exclusively, the European Union (EU) accession countries, have sought to reorganize and consolidate their intermediate levels of government. However, a gap still exists between capacity to collect information and subnational governments' needs. To be able to undertake their legally mandated responsibilities, the subnational governments need more access to subnational statistics. The process of decentralization may slow down or its potential may not be realized if the information needs of the decisionmakers and policymakers are not addressed.

Stakeholders in Subnational Statistics

One of the main characteristics of public administration during the pretransition period was an overcentralized system. The origin of this public administration was the idea that the country could be managed like a single factory, where the central administrative units have full control over the lower level units of the system. At that time information gathering was quite detailed and extensive. Such an approach generated unwieldy, mammoth bureaucracies, which attempted to cope, unsuccessfully, with the knowledge problem (Winiecki 1994).

The legacy of the region's socialist past is an ambitious information system rooted in the centralized economy, where the information needs of central offices were extensive and detailed, but the flow of information was in one direction only. Administrative decentralization took place in different ways in the countries of the region from the 1960s, and that decentralization led to a looser system of information gathering to improve the bureaucratic coordination of regional and economic processes (Kornai 1992). Different degrees of administrative decentralization have taken place in the region, and information has moved from bottom to top without any independent

control. This approach created an incentive structure that often resulted in overstatements of the true situation, so that locally generated information was often unreliable (Winiecki 1988).

In a decentralized setting six important stakeholders in information collection have a major role in the production of subnational statistics: ministries of finance, institutes of statistics, sector ministries and programs, municipalities, associations of municipalities and service providers, and international agencies.

Ministries of Finance

The main task of the ministries of finance is to prepare and manage the budget. The budgeting process at the national level requires reliable information about the budgetary institutions by sector and by different levels of government. The amount of detail passed from the municipal level to a country's ministry of finance depends on the structure of the intergovernmental fiscal relationship. In the process of budget preparation, negotiations, financial management, and monitoring of the budgeting process, a huge amount of information is gathered, but typically this information is not relayed back to the local governments.

In some countries, for example, Romania and Ukraine, the treasury controls all the financial information about subnational governmental units that could be extremely useful to policymakers at the municipal or regional level. The problem is that these countries are in the process of reforming their financial management systems and are paying little attention to the secondary use of the information.

Institutes of Statistics

Statistical offices are the key players in subnational statistics. The organizations of the statistical institutes are, in most cases, extremely hierarchical, but in some cases, for example, Bulgaria, horizontal relations could be important. In most of the countries a statistical law defines the range and content of data collection. The statistical offices are improving their collection methods and the range of information they collect with the help of technical and financial assistance from donor agencies; however, the countries faced little pressure to improve their subnational statistics. The statistical offices have set up databases at the subnational level, but the level of aggregation does not usually coincide with the needs of local governments. Extra effort is needed to make efficient use of subnational statistical information for local governments. In addition, even though the sector ministries are working with the statistical offices, they also have their own data collection systems.

Sector Ministries and Programs

Sector ministries have an important role in subnational statistics. In different sectors, depending on the detailed regulation of the task assignment, the ministries design programs both for operation and development. They use service data from their office of statistics and financial data from their ministry of finance, but developing their own data surveys is also accepted practice. The data providers could be the deconcentrated units of the central government and the organizational units (such as schools) under local government control.

Municipalities

Representatives of all but the smallest municipalities generally expressed their need for more data and information. Small municipalities tend to work with low-level staff who are not sufficiently trained, and therefore do not have the capacity to work at the policy level and use more data.

Generally, comparative data are missing, which is partly explained by the centralized system, but is also partly a methodological issue.

Local governments typically do not prepare evaluations of their decisions or analyses of their effects. They simply do not have enough resources (time, money, or people) to do so regardless of their level or size. Also, experience with policymaking and program evaluation is limited at the municipal level. The capacity of the municipalities depends on the size of local governments. Small local governments naturally have less capacity, and they have less need for data.

The need for information depends not only on the size of local governments, but also on the service delivery responsibilities assigned to them. Observers of reforms in the region raise the issue of "unfunded mandates," which are tasks that the central government transfers to subnational governments without providing adequate financing for their performance. Such mandates put added pressure on local finances to restructure local services without proper information and feasibility analyses.

Better informed and trained decisionmakers at the local government level would be an important element in implementing a decentralization strategy. The studies demonstrate that local governments need to recognize the potential advantages of their independence to increase their capacity. That awareness would, in turn, lead to more efficient and effective delivery of services.

Associations of Municipalities and Service Providers

Associations of municipalities play an important role in the process of decentralization. In some countries, for example, Bulgaria and the Slovak Republic, they are quite active and they not only provide training and technical support to their members, but they also lobby in the legislature and participate in budget negotiations. Most of their activity depends on the availability of information at the municipal level. To support the training and to provide technical assistance, they need information. For example, the local governments' new responsibilities to manage local affairs create a need for comparable information on different issues, such as the comparable cost of park maintenance, school services, and so forth. The performance indicator programs initiated by the U.S. Agency for International Development and other donor agencies aim to develop data collection and analysis capacity sponsored by national associations of municipalities.

In some countries professional associations of service providers, for example, a water and sewage service providers' association, provides comparable information on service indicators, such as prices, costs, consumption, and arrears. Such information would be useful for local governments, especially when they design programs to support low-income consumers.

International Agencies

A number of international organizations are concerned about the quality of data being generated by individual countries and have initiatives under way to improve data quality. Chapter 2 lays out a number of concerns about improving data quality.

One concerned agency is the IMF. (For more information on IMF initiatives see http://dsbb.imf.org/dqrsindex.htm.) The IMF is working to stimulate a dialogue and develop a common understanding of data quality. A key contribution of the IMF to data quality is the Special Data Dissemination Standard. The standard identifies best practices in the dissemination of economic and financial data in four areas (or dimensions) as follows:

- Data coverage, periodicity, and timeliness
- Public access to the data
- Integrity of the data
- Data quality.

All these issues were raised in the country reports summarized in this volume and in the workshops organized to discuss the draft country reports.

The IMF has also prepared a framework for assessing the quality of data used for macroeconomic analysis. The Data Quality Assessment Framework provides an integrated and flexible framework in which data quality is assessed using a six-part structure that spans institutional environments, statistical processes, and characteristics of the statistical products. Unfortunately, the focus is on data used for macroeconomic analysis and does not address the data needs of local government policymakers.

The United Nations (UN) is another international organization concerned about data quality. The UN became proactively engaged in promoting good practices in official statistics shortly after the transition in Central and Eastern Europe and the former Soviet Union started. The UN recognized that part of the transition process was about redefining the role of official statistics, as well as making clear to transition governments and other users of statistics that a good system of official statistics must meet certain general criteria. The UN developed the Fundamental Principles of Official Statistics, which were adopted by the UN Statistical Commission. (More information about the UN's efforts to promote good practices in official statistics can be found at http://esa.un.org/unsd/goodprac/bpabout.asp.)

With the aim of improving data quality in the European Statistical System (ESS),[1] in 1999 Statistics Sweden proposed creating the Leadership Group on Quality. The Leadership Group established terms of reference for its activities, which included

- Establishing a framework for considering quality issues
- Identifying key elements to be considered
- Obtaining information on the status of these elements in the ESS
- Demonstrating with examples how improvements in national statistics institutes and in the ESS could be made
- Proposing future actions for the ESS.

The Leadership Group on Quality produced 22 recommendations on how to improve data quality in the ESS. Perhaps most important, however, was how the Leadership Group redefined the notion of data quality to extend beyond accuracy to include a wider set of attributes, namely: relevance, accuracy, timeliness, accessibility, comparability, coherence, and completeness. (The summary report from the Leadership Group on Quality can be accessed at http://amrads.jrc.it/.)

Most important for the countries included in this study, the European Council has initiated a project to upgrade the statistics of countries seeking accession to the European Community. The initial purpose of the project is to upgrade statistical standards in countries seeking accession by

- Putting in place the necessary legal and administrative measures for the establishment of statistical services suitable for a democratic society and market-driven economy
- Preparing for the introduction of the statistical standards, classifications, and methodologies that are used in the European Community and internationally
- Enabling countries from the moment of accession to supply all statistics to the European Council in the same way as all the other member states
- Preparing for the transmission of data needed for the accession negotiations.

1. The ESS includes Eurostat and the national statistical institutes, which are the organizations responsible for producing official statistics in the member states of the EU.

The countries participating in this Eurostat project that are also participating in this World Bank Institute data project include Bulgaria, Romania, the Slovak Republic, and Slovenia. Again, the focus of the Eurostat project is primarily on national-level data and the project is just starting to get under way.

Responsibilities of Subnational Governments and the Role of Statistics

Powerful economic, demographic, institutional, and technological changes are occurring throughout the world. Populations are growing older and migrating to cities, population growth in the developing world continues, and the distribution of income in most countries has become increasingly disparate. These changes imply pressures for public expenditures that differ depending on the types of economic and demographic changes occurring. At the same time, the capacity of traditional revenue sources is affected by similar factors. None of these economic or demographic changes can be analyzed well without the data that are appropriate in relation to the problem and the level of government in question.

These types of demographic and economic changes are largely beyond the control of any country, but they cannot be ignored in the development of any effective public policy. The ability to monitor these changes and to analyze their impacts on public finances at all levels of government is crucial to the fiscal stability of a nation. The usefulness of such analysis depends on the availability of good quality, timely data that are relevant to fiscal issues at the national, provincial/state, and municipal levels of government.

In this context, subnational information has or should have an important role in improving the efficiency of public administration and democracy in four areas: intergovernmental fiscal relations, regional programs, subnational programs, and local government financial management.

Intergovernmental Fiscal Relations

Efficient decentralization depends on the proper division of service delivery responsibilities and revenue assignment among tiers of government, which is a design issue. Although some general economic principles influence the efficiency of allocation, the countries' individual, historical, and cultural backgrounds also have an effect (Bird 2001; Ebel and Yilmaz 1999).

Own-source local revenues, such as local taxes, user charges, and revenues from property in the countries examined here are less important than transfers (grants and shared revenues) from the central government. For example, in 1999 transfers represented 75 percent of total local government revenues in Slovenia (OECD 2002). Similarly, in 2000 subsidies from the central government accounted for 41 percent of municipal budgets in Bulgaria, and central government tax revenues shared with municipalities accounted for another 38 percent of municipal revenues, that is, central government transfers accounted for 79 percent of municipal revenues. The experiences of other transitional countries showed that increasing the role of own-source revenue as a key condition for local autonomy could lead to increases in regional inequality if not supported by a data-based impact analysis.

Traditionally, in the Soviet-type systems the transfers were negotiated, influenced by historical expenditures among the different levels of governments, and the unreliability of the system was influenced by the soft budget constraints. Most of the countries examined here are moving away from such a system and toward a system of formula-based normative grants, but some intergovernmental grant systems still have some characteristics of the Soviet-type negotiated grants. However, formula-based grant systems can easily be manipulated if the system cannot be fed with reliable, timely data. For example, in Ukraine a formula approach to equalization grants has been in place since 2001, but the formula includes coefficients that are determined by the central government,

and those coefficients significantly influence the allocation of equalization grants across local governments. Progress is being made, however, in all the countries examined in moving from a purely negotiated system of grants to a more objective and predictable formula-driven system.

In intergovernmental fiscal relations, the design of the transfers to close the horizontal and vertical "gaps" should be based on the expenditure needs and revenue capacity of the subnational government. The advantages of the normative (formula-based) transfers, including the equalization grants, are widely accepted, even in politically less decentralized systems. The lack of reliable information related to both the expenditures and revenues of local governments are the most important technical constraints related to decentralization. The calculation of expenditure needs is a key element in well-designed fiscal relations. To calculate different expenditure needs for the relevant services that local governments provide, a relatively up-to-date database is needed that cannot be manipulated by the stakeholders. The estimated and politically accepted expenditure norms (Alm and Martinez-Vazquez 2002) should be used in designing grants allocated to each subnational government. The lack of appropriate information leads to a system that is full of interventions by the central government to correct the mistakes resulting from discretionary decisions. Subnational governments in the region expressed their need to guarantee the "minimum level of services," which is partly a technical term, partly political. Without subnational statistics, achieving political agreement on the minimum level of services is an illusion.

On the revenue capacity side, the fairness of the allocation is widely questioned by subnational governments even in the systems that use the formula-based method, because of the indicators used in the formula, which are either not the relevant ones or are not reliable. In the case of the equalization grant, the tax capacity of the subnational unit should be included in the formula to arrive at a fair system. The general problem is that because of the lack of proper information, local tax capacity cannot be measured. The absence of this information normally leads to huge inequalities among regions and local governments and raises the moral hazard problem, so the central government is forced to intervene on an ad hoc basis. Because of a lack of the right incentives, local governments with low tax effort will be better off and the tax capacity will not be used efficiently. Typically, the central government takes away part or all of the "surplus," giving the subnational governments no incentives to optimize their own revenues.

An overall observation about the intergovernmental fiscal relations of the selected countries is the unpredictability of the transfer system. On one hand, it is understandable that in countries moving from the old structure of a socialist planned economy toward a market economy, the regulatory framework is changing rapidly. On the other hand, the new elements of the regulations are sometimes infeasible partly because of the lack of information. For example, in Romania formula grants are allocated to county councils, and they in turn are supposed to use a formula for allocating funds to the needy municipal governments in the county. However, because of the underdeveloped information system, the formula could not incorporate the appropriate factors. Thus the counties had to change the formula-based procedures, causing an unacceptable outcome. Other examples arose when a change in transfers, local tax laws, and user charge regulations led to unexpected results because of poor preparation. Both the central government's lack of the capacity and the lack of proper information could be blamed for these failures.

Regional Programs

Because of uneven development, the importance of regional programs is increasing. EU accession gave some countries an important incentive to develop their basic regional statistics. The EU's structural funds, which are allocated based on regional gross domestic product, have had a role to play in this process, particularly when they account for a substantial proportion of public investment. Regional policy is thus an important aspect of public policies.

In the EU, regionalization is an important process that involves major transfers of responsibility, as the region is the level to which power, especially legislative power, is devolved, or at which it is exercised. With the exception of Slovenia, this process is only starting in the countries that participated in this project. Regions do exist in Slovenia, but they are purely statistical regions and are certainly not entities with fiscal authority. Even though the heated discussion about the formation of fiscal regions or provinces has abated somewhat, it will undoubtedly resurface, because a special information system is in the process of being established at Slovenia's Agency for Regional Development, a body within the Ministry for the Economy. The core of this information system will be a data warehouse containing all the information about state-sponsored aid schemes, preaccession schemes, and development programs and projects.

All the other countries have some form of intermediate level of local government. As EU accession proceeds, this tier of government will take on more and more responsibility. Having data available to help inform regional policies is therefore critical. This availability requires adequate, timely, and reliable data that can be disaggregated below the regional level and used for comparisons across regions.

Strategic Planning for Subnational Programs

More and more responsibilities are devolving to subnational governments. The efficiency of the decentralization depends on the subnational governments' capacity to develop locally relevant policy on issues such as local economic development and sectoral programs (housing, infrastructure, education, tourism, and so forth).

The heterogeneity of the local government sector and the differences among local governments demand that they determine their own priorities and policy measures in the areas for which they are responsible. Even in the case of delegated functions, local governments could influence locally managed, centrally financed (or cofinanced) social programs. In this case knowing and monitoring the effects of the central programs and designing the locally financed programs to supplement or correct the shortcomings of the central programs would be crucial.

Local economic development as part of strategic planning is a newly developing area of local-level planning. Several elements of the local economic development strategies need information, such as the competitive assessment part.

An important issue related to sector programs is the spill-over effect, that is, when the catchment area for certain services is larger than the municipality's administrative area. This could apply not only to economic development, but also to housing issues, environmental protection, and some basic services. Thus individual local governments must not only jointly agree on policy, but should also agree on data collection to support policy preparation.

Local Government Financial Management

Local statistics and information account for a crucial part of local financial management. In addition to having access to information related to transfers from the central government, budget preparation also requires a lot of local information. Modern budgeting techniques—for example, program budgeting, performance budgeting, and zero-based budgeting—presuppose broad knowledge about local issues, such as fiscal indicators and sector performance.

Another element of modern financial management is the performance-based contract, whereby different incentive mechanisms are built into contracts with service providers such as district heating companies, water companies, and so forth. The monitoring of such contracts requires a carefully designed information system that goes beyond accounting data.

For the countries examined here, these data needs are often not being met by the relevant statistical institutes. In part this failure reflects archaic legal frameworks. For example, in the

Slovak Republic the statistical law primarily serves the data needs of the central government, parliament, and international institutions. As a result, most data collection activities are geared toward the data needs of the state administration, not of local self-government. Although this approach is understandable in the context of the old Soviet-style centralized system, as local governments take on more responsibilities, the need for information to help them make informed policy decisions will grow. In the absence of such information the perceived benefits of fiscal decentralization may not be fully realized.

Impediments to the Development of Subnational Statistics

Countries face six impediments as they attempt to develop subnational statistical systems: technical issues, financial capacity to produce subnational statistics, methodological issues, human capacity, legal constraints and accessibility, and institutional issues.

Technical Issues

Subnational statistics in the region are in an early stage of development, and several technical issues hinder their wider use. Greater transparency of both methodologies and data sources would help solve the problems of contradictory information and unreliable information. Typically, different institutions collect information about the same problems, but because they use different methodologies and sources, they produce contradictory results. The data collectors seldom work together to eliminate the contradictions and overlaps.

The timing of the data is crucial, because certain types of users need the most recent data, and they have to make decisions that cannot be postponed because providing "good data" needs time. Timing is an important criterion for any cooperation between the data collecting and data using agencies.

Information technology has an important effect on public administration. The countries in the region try to use modern information systems in public administration. Computers have been widely used by local governments, but their use depends on the structure of the local government system. The secondary use of the information created in the process of providing public services will be one of the most effective information sources. For certain programs, administrators use software that provides the needed information automatically; no separate data collection system is needed.

Another important technical issue is the transfer of the data. Traditionally hard copies are used, but increasingly data transfers are made on floppies, and less frequently over the Internet. Use of the Internet to access data and information in a more flexible and less costly way would be an important step forward for future development. In the selected countries some positive developments are evident, but as yet no clear strategy has taken root in these areas.

Financial Capacity to Produce Subnational Statistics

The needs assessment studies emphasized the relationship between local governments' financial capacities and the probability that they will develop their own policy. Typically, local governments do not have resources to pay a separate staff or contract out to consultancy or research institutes to carry out evaluations and policy analyses.

Beyond the lack of financial resources, another factor works against the wider use of local statistics: a belief that the information is not productive in the economic sense. Evidence that a good information system could contribute to the efficient system is missing. A related issue that emerged in all five countries included in this study is related to what data are being collected and how they are being used. In the previous system, reams of data were generated to try to measure everything possible, primarily in the economic sector and at the central government level. Much

of these data no longer serve useful purposes. Therefore, given an environment of extremely constrained resources, analysts need to re-evaluate how resources are used and data collectors need to shift from collecting obsolete data to collecting the data necessary for local government policymakers to make informed decisions.

In the case of the fragmented local government system, building up a proper capacity to collect and manage information is not feasible. Here some kind of cooperation is needed, and that cooperation cannot be organized without government intervention and support.

Methodological Issues

Having comparative statistics and indicators, for example, on the performance of the public sector, would be a huge step toward developing subnational indicators. Those involved in local public management need comparisons of the levels, costs, and allocation methods for the different services to design their own strategies. The comparisons should be based on careful analyses of the institutional and financial environment of the local sectors. Local research capacity at research centers or local government associations will provide information on the development of performance indicators.

The level of aggregation is an important issue, partly because different data collecting organizations use different territorial units. For example, unemployment data are available according to the territorial units defined by the local offices of the ministries of work, and those data are not comparable to other types of information. In Bulgaria, the amalgamated municipalities do not have individual information about their settlements. A related issue is the ambiguity in locating certain economic activity, for example, multiplant companies can choose the area in which they will register their activity. This issue is partly methodological and partly one of incentives.

Local governments formulating policy in areas where the spill-over effect is significant need information about the territory surrounding their own municipality. For example, developing urban policy without managing suburbanization cannot be effective.

Different organizations are increasingly using surveys. Many methodological issues are related to survey sampling and data cleaning techniques. Typically, national surveys do not use sample sizes that are useful at the local level. A cost-efficient solution could be a piggybacked survey supported by subnational governments.

Human Capacity

A more important issue is that the lack of human capacity is an important impediment to the more efficient use of subnational statistics. Civil servants tend to have low computer literacy, especially in the smaller local governments where the staff has less education and lower compensation. This problem can be managed through intensive training. Municipalities need trained experts who are able to understand subnational statistics and use them to support decisionmaking.

Legal Constraints and Accessibility

One of the primary challenges facing statistical institutes in the selected countries, as well as in other countries, is a concern about the confidentiality of data. The use and distribution of regional data, especially for small jurisdictions, raise the problem of confidentiality.

In addition, local databases are not linked to each other, and only a small number of experts are aware of their existence. Such limited use makes for a waste of the public resources used to create the databases. Limited use is not just a legal issue, but an organizational and management issue.

Institutional Issues

Decentralization and the efficient use of subnational statistics are closely related issues. The basic institutional question is how much autonomy the subnational government will enjoy. The incentive to improve the performance of local governments will force their staff to develop the capacity to use subnational statistics efficiently.

Because of the heterogeneity of the data producing institutions, a high level of cooperation is needed. Institutions such as statistical offices, national banks, and ministries of finance fight for more information to expand their power. They sometimes do not trust each others' information. Sharing data and information is sometimes against the institutions' short-term interests, thus political and legal will is needed to improve the current situation.

Cooperation among small local governments is also important, and associations of local governments will have a role in helping achieve local horizontal cooperation.

Conclusion

Realizing the potential benefits of fiscal decentralization depends on creating the necessary institutions and putting in place those structures needed to make the institutions work properly. Institutional reform is necessary, but insufficient, for an effective system of fiscal decentralization. Although much work has been done over the last decade to strengthen institutions necessary for fiscal decentralization, much less attention has been focused on identifying and strengthening those factors necessary to ensure that the institutions realize their potential. In the next stage of consolidating fiscal reform, attention will shift from creating fiscal decentralization institutions to ensuring that they work adequately to realize the perceived benefits of fiscal decentralization.

In this context, the experience of the five countries examined here suggests that development of a system of subnational statistics is a neglected area that needs more attention if local self-governments are to achieve their potential in a system of fiscal decentralization. Progress in this area requires two parallel sets of initiatives. First, the relevance, accuracy, timeliness, accessibility, comparability, coherence, and completeness of subnational data must be improved. This issue is primarily a technical one that can be addressed by the EU as part of the accession process, albeit the primary focus of the EU's data project is improving the quality and comparability of national-level data. Second, the capacity to make use of existing data for improved decisionmaking needs to be developed at the local government level. This will ultimately lead to a greater understanding of the need for such data and, in turn, will encourage statistical organizations to reallocate limited resources to address the emerging needs of new data users: local officials.

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2

Globalization, Localization, and Statistics: Policies toward Poverty Reduction and Sustainable Development

Mustafa Dinc

At the Millennium Summit in September 2000, the United Nations and its member states reaffirmed their commitment to working toward a world in which sustaining development and eliminating poverty would have the highest priority. The resulting Millennium Development Goals (MDGs) have been endorsed by 189 countries. These goals are an outcome of agreements and resolutions resulting from conferences organized by the United Nations during the past decade and have been commonly accepted by the international development community as a framework for measuring development progress. Even though all international development institutions and their members have endorsed the MDGs, they are ambitious and difficult to achieve. They require mobilizing significant resources at the national and international levels, as well as intellectual and technical support from national and international development agencies, academia, and research institutions worldwide. The purpose of this chapter is to discuss the interwoven structure of poverty reduction activities and sustainable economic development efforts by policymakers in developing countries, particularly at the local level, and the importance of subnational statistics for successful programs in these endeavors in the light of the MDGs.

The MDGs comprise 18 targets and 48 indicators. When possible, the targets are given as quantified, time-bound values for specific indicators. The goals focus the efforts of the development community on achieving significant, measurable improvements in people's lives. They establish yardsticks for measuring results, not just for developing countries, but also for donor countries that help fund development programs and for the multilateral institutions that help countries implement them. The first seven goals are mutually reinforcing and are directed at reducing poverty in all its forms. The last goal—global partnership for development—is about the means to achieve the first seven.

The MDGs have created awareness and helped global attention focus on the fight to eliminate abject poverty from the world, which in turn underscored the importance of statistical data for measuring and monitoring progress. These statistical data are derived from national statistical systems and are only as good as the capability of the system. Furthermore, effective statistical systems are not used just to monitor progress toward the MDGs, but also underpin sustainable development by providing the basis for rational decisionmaking, economic management, and efficient allocation of scarce resources.

In developing efficient national statistical systems, countries need to pay attention to the level of sectoral and spatial aggregation of relevant statistics for policymaking. Development practitioners are well aware that a rising tide does not necessarily lift all boats, and almost all countries exhibit significant economic and social variations among regions. These variations, in turn, have forced local governments to take greater responsibility for delivering and financing public

services.[1] This trend has resulted in programs to reform local governments that include devolving more spending and tax activities to them. Central to this trend and to ensuing reform programs are the anticipated allocative and managerial efficiency gains in the provision of public services that are essential for people's well-being, and also critical for attaining greater equity, both among different groups of society and different parts of the country. Most analysts anticipate that these achievements will significantly contribute to reaching the MDGs.

An important aspect of the trend toward greater local responsibility for delivery of public services is that local governments are becoming more responsible for developing policies and programs tailored toward addressing the poverty problem. Hence subnational governments' competence in designing public policies and delivering public services is crucial in influencing the level of poverty. The literature on fiscal decentralization presents evidence that the quality of local services, especially health and education, is highly correlated with the incidence of poverty (see, for example, Bird and Rodriguez 1999). A common characteristic in many countries is that local governments often lack the full institutional and managerial capacity to carry out their new responsibilities. The lack of the information and statistical data they need for better policymaking and monitoring is another critical problem local and subnational governments face. Despite the increasing demand for statistics, national and international efforts to develop appropriate and sustainable statistical capacity still fall short at both the national and subnational levels.

The next section discusses the incidence of poverty and points out the importance of subnational statistics in fighting poverty. The following section evaluates sustainable development in the context of regionalization and localization and its link to subnational statistics. The problems of national statistical systems at both the national and subnational levels are discussed in the fourth section. The final section concludes the chapter.

Poverty Reduction and Subnational Statistics

The need for subnational demographic, social, economic, and fiscal data is becoming more evident at a time when subnational governments are involved in the broader national and global objectives of poverty reduction. Subnational statistics are needed not only to monitor progress in poverty reduction, but also for ex ante policy formulations of subnational governments. Compilation of the subnational data on demographic, social, economic, and fiscal indicators informs central governments of the tasks ahead, especially in relation to designing an effective intergovernmental system, while at the same time it allows quantification of a region's specific needs for assistance. It also permits monitoring of local governments as they work to achieve national policy objectives of reducing poverty and improving living standards.

Another important factor that makes subnational statistical data imperative is the change in development practitioners' understanding of the definition and measurement of poverty. They now recognize that poverty is a complex and multidimensional issue and is not defined only by income or consumption. Defining poverty has been an exercise involving significant debate among scholars and policymakers, because the definition determines the relevant public policies for eliminating poverty as well as for measuring and monitoring the results of previous actions. The definition of poverty now includes access to services (education, health, clean water, and so forth); access to and productivity of assets (natural, social, human, physical, and financial capital); interaction with existing structures and processes (policies, markets, service delivery, participation); and vulnerability (trends, shocks, and seasonal variations) (World Bank 2000).

1. "Local government" is used broadly to describe all types of subnational governments, including the decentralized provincial and district representatives of central government.

Poverty can simply be defined as a situation in which a person or a family is unable to maintain an adequate level of living by the standards of their society or does not have sufficient resources to pay for the essentials of life: food, shelter, and medical care. It can also be defined as not having some minimum standards that are needed to live comfortably or safely (Burton 1992; Chalfant 1985; Devine and Wright 1993; Jennings 1994). The relative deprivation definition, that is, the failure to attain living standards that are customary in the society, views poverty not only in terms of material goods, but also in terms of the psychological effects on individuals who do not have certain resources that the people around them have. The basic principle underlying this approach is that the poor see affluence all around them and assess their situation or position in relation to both basic needs and the wealth in society as a whole (Gray 1978).

These discussions suggest the existence of three basic approaches to the definition and measurement of poverty: absolute, relative, and subjective (Dinc 1995).

The absolute approach defines poverty as either income or consumption below some certain level that represents a minimum standard for the poor. The disadvantage of this approach is that it is difficult to establish an objective minimum that is applicable over a long period or across divergent population groups. It requires adjusting the list of minimum necessities for different regions or population groups and for different time periods.

The relative approach defines poverty as a proportion of the median income or consumption of the rest of the society. This approach involves distribution of income and equity issues. It assumes that everyone has a right to share and use the wealth of a nation generated by society as a whole. The disadvantage of this approach is that it represents a moving target for policy assessments and requires designing income redistribution programs that are difficult, sometimes controversial, to carry out, particularly in developing countries.

The subjective approach relies basically on the opinions of those who believe themselves to be poor. This definition is based on surveys that use households' own assessments of the minimum or sufficient amounts of income or consumption that they need and involves both absolute and relative definitions of poverty. The minimum or sufficient amounts of income or consumption reflect the absolute side; what other people own reflects the relative side.

Regardless of the definition, each country has an official poverty line that sets a threshold that defines the poor as those whose total family cash income falls below a specified monetary amount. This official poverty level is adjusted annually for inflation. In recent years international development agencies adopted US$1 and US$2 poverty measures for cross-country comparisons. Even though the official definition and measurement of poverty has been heavily criticized, such an absolute standard provides a fixed benchmark that can be used to evaluate progress over time (Dinc 1995).

Among the many criticisms, the following are the more convincing. The first criticism relates to the consumption patterns of the poor. Experts do not agree on the right basket to represent the needs of the poor. In other words, what is a necessity and what is a luxury depends on the period in time and the social conditions of the society in which the poor live. The goods people consume are likely to change over time, and the definition of the minimum necessities is likely to change as well (Devine and Wright 1993; Ruggles 1990).

The official poverty line is based on cash income, and some argue that this may cause the mismeasurement of poverty, because overall wealth or assets—physical, financial, and human—are not taken into account (Burton 1992; Haveman 1987; Jennings 1994; Oliver and Shapiro 1990). For example, a relatively wealthy family with a small amount of current income might be classified as poor. Similarly, a migrant worker family with money income above the poverty line, but with little access to housing above substandard levels would be classified as nonpoor, yet an equivalent family with slightly less income but a rent-controlled apartment would be defined as poor.

In-kind transfers generally are not taken into account and, therefore, may exaggerate estimates of poverty. The argument here is that if the noncash benefits of the poor were counted, the number of poor might be much lower (Friedman and Friedman 1979; Gilder 1981; Murray 1988).

The use of a single national poverty standard overlooks regional differences. The cost of living is substantially different in various regions and cities of a country, in particular, the cost of living is generally higher in the larger cities where the poor tend to be concentrated. A single national poverty standard understates the extent of poverty in higher-cost cities and overstates it in lower-cost cities and rural areas (Devine and Wright 1993; Jennings 1994).

Characteristics and Trends of Poverty

One of the key dimensions of poverty is that it is a spatial phenomenon, and location and context determine the nature and composition of poverty. Therefore an understanding of the scope of poverty requires knowing where the poor are concentrated and how they maintain their livelihoods. Hence when measuring poverty the definition of the location of the poor, production, and consumption patterns and an understanding of the complex structures of poor households resulting from seasonal migration and links with urban and rural households require special attention.

In the 1950s and 1960s, in both developing and industrial countries, most of the poor tended to concentrate in rural areas and small towns. Since the 1980s, rapid urbanization has reversed this trend in most countries, and the poverty rate in large cities has increased significantly; however, in many developing countries, particularly in Africa, rural poverty is still more serious than urban poverty.

Recent studies (Baker and Grosh 1994; Bigman and Fofack 2000; Christiaensen, Demery, and Paternostro 2002; Fofack 2002; Minot and Baulch 2002) have demonstrated that in most countries poverty is spatially concentrated. Extreme poverty in inaccessible areas with unfavorable terrain often coexists with relative affluence in more favorable locations close to major cities and markets. Information about the spatial distribution of poverty is of interest to policymakers and researchers for a number of reasons. First, it can be used to quantify suspected regional disparities in living standards and identify which areas are falling behind in the process of economic development. Second, it facilitates the targeting of programs whose purpose is, at least in part, to alleviate poverty through efforts such as providing education, health, credit, and food aid. Third, it may shed light on the geographic factors associated with poverty, such as mountainous terrain or distance from major cities.

In Africa, for example, researchers found that economic policy reforms (improving macroeconomic balances and liberalizing markets) have been conducive to reducing poverty, but that location mattered significantly for poverty reduction strategies. By virtue of their sheer remoteness, some regions have been left behind when growth picks up. In the Philippines, for instance, the nature and dynamics of determinants of poverty have been influenced by the spatial location of households, and the postdevaluation growth period did not significantly alter the pattern of determinants of poverty.

India is one of the most important examples for demonstrating the importance of the spatial aspect of poverty. How much India's poor have shared in the economic growth unleashed by economic reforms in the 1990s has been extensively debated. Investigators have found that India probably maintained its 1980s rate of poverty reduction in the 1990s, but that performance across states exhibited significant diversity. India's overall economic growth in the 1990s did not spread to those states where it would have had the highest impact on poverty. States with relatively low levels of initial development and human capital were not well suited to reducing poverty in response to economic growth (Datt and Ravallion 2002). This finding shows that achieving higher

aggregate economic growth is only one element of an effective strategy for poverty reduction. The sectoral and geographic composition of growth is also important, as is the need to improve existing human and physical capital.

Causes of Poverty

The causes of poverty may be explained by two approaches. The first approach assumes that poverty is a supply problem or an individual problem. The second approach argues that poverty is a demand or a structural problem.

Supply-Side Theories

The various versions of supply-side theories argue that poverty is a supply problem that reflects the lack of marketable skills on the part of the poor. In a competitive environment workers' training, knowledge, and work ethic will determine whether people climb out of poverty or stay mired at the bottom of the economic ladder (Kelso 1994). According to the supply-side theories, people are poor because

- They are uneducated, unprepared, and do not have adequate skills to hold a job.
- They are unmotivated and dependent on welfare.
- They lack the social and cultural values and work ethics that are common in the mainstream of society.
- They suffer from a greater number of broken families and out-of-wedlock births.

Human capital theory. This theory focuses on education and training. According to this approach, people are poor primarily because of a lack of education, training, or job skills, and the lack of human capital prevents economic mobility. This theory presumes that the economic system is effective for anyone who is properly skilled and educated, and that poverty can therefore be prevented and significantly reduced if people can obtain the skills necessary for the jobs available (Devine and Wright 1993; Haveman 1987; Jennings 1994; Kelso 1994; Levin 1977; Schiller 1976).

The evaluation of education programs in relation to poverty is based on two criteria: first, the total impact of the program on reducing poverty; and second, the program's relative efficiency in comparison with other alternatives, that is, its cost-effectiveness.

Education, technological and economic change, and poverty are closely related. Technological or structural changes in the national or regional economy may make workers' skills outdated. Therefore a large number of people may find themselves unemployed, and new participants in the workforce may face difficulties finding a paying job (Fitzgerald 1993; Jennings 1994; Wilson 1987).

Cultural and moral explanation. This theory of poverty stresses the importance of individuals' attitudes and motivations and argues that improper social and work attitudes, including a lack of moral standards, limited cultural attributes, or particular personal dispositions explain poverty and its persistence among some groups. This approach is the most controversial of poverty theories (Banfield 1970; Burton 1992; Gilder 1981; Lewis 1965; Mead 1992).

Control theory. This theory states that cultural values and, in some cases, supervision and even coercion, are necessary to maintain the cohesion and smooth functioning of society. Proponents of this theory argue that if individuals and groups pursue only their self-interest in relationships, the danger exists that the social structure of society may be harmed. Control theory assumes that people are pushed from behind by their values rather than pulled from the front by

the possibility of economic gain (Kelso 1994). In other words, people's actions are determined more by their internal gyroscopes than by their calculations of economic gain.

Exchange theory. This theory argues that the willingness of the poor to become better-trained workers depends heavily on the economic payoffs of acquiring additional skills. The motivational problems of the poor are thus purely economic in nature. The theory assumes that individuals will try to maximize their future gains by choosing among the options open to them (Kelso 1994). If individuals are rational, economic actors constantly trying to maximize their self-interest, then the behavior of the poor is nothing more than a rational response to limited work opportunities.

Strain theory. Strain theory argues that the poor have internalized the values of the larger society, which stress achievement and accumulation, but cannot realize their goals because of the highly stratified nature of the economy. Strain theory assumes that all people are equally socialized into a set of values that stress achievement and success. It also holds that people engage in undesirable actions only when they are unable to realize their culturally induced goals (Burton 1992). The actions of the poor are thus merely a consequence, rather than a cause, of their difficulties in finding meaningful employment opportunities.

Family structure explanation. This is another popular explanation for poverty among the supply-side theories, and argues that the incidence of poverty is closely related to family structure. The breakup of two-parent families affects the size of the poor population through its impact on the workforce and the future earnings of family members. In many cases divorce or separation forces women who have little formal job training or work experience into the labor market. This change in status obviously has a negative impact on the economic prospects of children. The children are also likely to remain in poverty longer because of the devastating impact of single parent homes on their psychological and economic well-being. Furthermore, poverty may occur simultaneously with a household transition, because household resources are divided and economies of scale are lost after the split (Bane 1986; Jennings 1994; Kelso 1994).

Lack of entrepreneurial skills. This approach points out that entrepreneurial skills are a crucial factor in upward mobility and argues that a group's tendencies to start businesses is important in achieving financial success (Sowell 1981, 1983). The underlying rationale behind this approach is that if people do not have the necessary skills to find a job and are also without entrepreneurial skills, they will most likely become poor. Even poor people who do have entrepreneurial skills can experience upward mobility and get out of poverty, which means that learning how to fish and catching your own is always better than getting a few fish from someone else every day.

In theory, this may sound like a feasible way for the poor to achieve upward mobility, but in reality it is difficult, if not impossible, because several factors need to be in place to establish and run a successful enterprise, such as access to information and markets and the availability of financial, physical, and human capital.

Demand-Side Theories

Demand-side theories emphasize the importance of structural factors, including social, institutional, and economic factors, as the causes of poverty, and argue that poverty is essentially a demand problem. The problems of the poor are a result of the lack of jobs that pay enough. That is, the makeup of the economy is the key variable in determining how much opportunity is available for the poor to escape poverty. In this view, certain patterns of large-scale socioeconomic

arrangements and changes cause poverty and prevent its alleviation (Goldsmith and Blakely 1992). According to demand-side theories, people may become poor because of

- Macroeconomic changes and cyclical fluctuations
- Changes in the structure of the economy that affect low-skilled people disproportionately
- The insufficiency of the minimum wage to maintain an adequate quality of life
- Discrimination (racial, religious, gender).

Macroeconomic explanations. A slowdown in job growth because of cyclical fluctuations in the economy makes it difficult for the poor to get out of poverty. In many developing countries the biggest obstacle to eliminating poverty is that the economy seems unable to generate enough jobs to employ the poor (Danziger and Gottschalk 1985). Another important fact is geographical mismatch. In most cases cyclical changes may not have their anticipated effects, because the nationwide economic expansion generally does not spread evenly around the country. In many countries the extreme poor have been bypassed by the expansions of previous decades (Kasarda 1988; Wilson 1988). Thus what is important is not whether the overall economy prospers, but whether that prosperity has found its way to the poor in different regions of the country.

Changes in the structure of the economy. These generally occur on three fronts in both industrial and developing countries: technological changes, locational changes (decentralization), and deindustrialization.

These changes have brought about regional transformations of industry and have been accompanied by urban restructuring. With rapid changes in technology and transportation costs, most industrial firms have moved to new locations to exploit cheaper production factors (Goldsmith and Blakely 1992; Jennings 1994; Kasarda 1988; Katz 1989; Wilson 1988). In a global sense, the relocation of firms may have created new opportunities for people in these new locations, mostly in developing countries and regions, but at the same time it has caused the loss of manufacturing jobs and growing unemployment in regions where they were previously located. In addition, relocated firms tend to employ fewer workers in their new locations by adopting new production technologies.

Another important impact of the transformation of major metropolises from centers of goods processing to centers of information processing has been a major shift in the skill requirements for employment (Kasarda 1988). The replacement of low-skilled manufacturing jobs by high-skilled positions has made it difficult for those left behind to find jobs in their neighborhoods. In addition, the out-migration of firms and jobs has made it difficult for the poor to commute given their limited means of transportation.

Low wages explanation. This theory argues that low wages and the lack of jobs at adequate wages might be two of the most important causes of poverty. One of the key factors this approach emphasizes is that the officially set minimum wage may not be sufficient to provide the means for a decent living, and therefore does not give people enough incentive to work (Blustone 1969; Devine and Wright 1993; Jennings 1994; Kolko 1962; Levitan and Shapiro 1987).

Given that in a market economy wages are determined by both demand and supply, looking for a better explanation in terms of the wage issue is imperative. For example, although any decline in demand for labor will keep wages from rising, supply factors, particularly workers' inability to increase productivity, will also prevent wages from rising. The assumption here is that if workers can increase their productivity, employers will be able to pay employees higher wages without increasing the prices of their goods and services. Therefore the key to improving wages is to increase productivity (Kelso 1994).

Discrimination explanations. Discrimination as an explanation of persistent poverty is among the most hotly debated theories. This explanation argues that the underlying driving force behind any form of economic restructuring is social rather than technical, because corporations want to avoid hiring minorities, and hence they try to avoid areas where minorities are concentrated (Squires 1994). This theory also argues that in many countries education, housing, and insurance and mortgage lending practices are based on racial, religious, and other discriminatory considerations. These practices, in turn, may create a vicious circle for the poor.

Understanding the Complexity of Poverty

The foregoing discussions demonstrate that from its simple definition to its causes, poverty is a complex and multidimensional issue. To understand poverty, its root causes, and locational concentration and to develop sound poverty reduction programs a significant amount of information is clearly needed. Our understanding of the spatial nature of poverty is determined by the availability of subnational data and other relevant information. A lack of data about a population's socioeconomic characteristics, about the levels and characteristics of public expenditure, and about poverty at the local level hampers efforts to design policies to address the root causes of poverty.

The availability and accessibility of reliable and timely data at the national and subnational levels involve the supply side of the issue, and depend greatly on the capacity of the statistical system that produces them. In many cases, however, the demand for national and subnational data by users is as important as the availability of data, because the demand for data at the national, regional, and local levels is closely linked to the availability of local analytical and decisionmaking capacity. Therefore governments at the national and local levels need to understand why statistics are important in fighting poverty and to recognize the value of an effective and efficient statistical system along with the local capacity to analyze data.

Globalization and Local Economies

The world economy has been undergoing unprecedented changes in terms of its organization, composition, integration, and interdependency. In recent decades the expansion of market boundaries and the reduction or elimination of trade barriers have brought new opportunities to regional industries, while simultaneously exposing them to increased competition from both domestic and foreign producers. Within the context of an increasingly integrated world economy, regional economies have become increasingly crucial for national economies, and in some cases dominate the national economy from a leading technology or entrepreneurial perspective. This trend is recognized as producing spatially decentralized but economically functional regions. The rise of regional economies as the building blocks for international competitiveness has been widely recognized by scholars across the world. Furthermore, competition and cooperation among these dynamic regions will likely dictate the future more than nation states themselves (Haynes and Dinc 2000).

As the private sector is the driving force behind economic growth and development in a market-oriented economy, given the current globalizing and increasingly borderless economic environment, creating a business climate in which all agents of society can interact efficiently and effectively is crucial. Such an environment will help countries retain and expand existing businesses and attract new investments, all of which will help generate new jobs and income. New jobs and income, in turn, will become the best remedy for alleviating poverty. New investment decisions by both domestic and foreign firms entail a lengthy process, and in most cases involve considerable research, particularly in terms of where these new investments will be located. The availability and accessibility of subnational information will shorten the decisionmaking process

and reduce its costs significantly, and the resulting evidence-based investment decisions will be much more accurate.

Regional and Local Economic Development

Industries continue to decentralize to advantageous locations. The composition of intra- and interregional economic systems continues to show strong specialization but significant and continued interdependency. New manufacturing methods, including flexible manufacturing, just-in-time production, short and niche-specific production, and customer-focused production, increase sensitivity to markets in most sectors, while information technology makes responses to that sensitivity increasingly global. To take advantage of these new production technologies effectively, rapid response is required in the production chain, all the way from suppliers to customers. Rapid response means that hard infrastructure, including telecommunications and information systems, become increasingly central to the support of efficient high-end services (Haynes and Dinc 2000). The result is that interdependency across regions in terms of interregional trade increases the interdependency of regions on each other's infrastructure support. Congestion in Bombay means a delay in production in Tokyo, which in turn means that the access to a new market in the Netherlands may be lost to a competitor.

Such regions are increasingly polycentric rather than monocentric, and despite the best efforts of planners and urban policymakers, they continue to expand and decentralize to lower residential, and even lower employment, densities. In support of these regions, communication and transportation technologies continue to enable lateral growth across the flattened regional periphery rather than in the traditional hierarchical, monocentric, radial fashion of the past (Haynes and Dinc 2000). Terms such as globalization, restructuring, decentralization, organizational flattening, corporate downsizing, consumer focus, flexible manufacturing, the agile organization, networked production, the virtual corporation, and the information economy are all not only indicators of this new pattern, but also part of our daily lives.

Having different economic endowments, in a competitive environment, regions have taken an increasingly active role in economic development policy via local, state, or provincial governments to restructure and improve their economies. Many of these policies involved some kind of low-interest loans, tax breaks, industrial recruiting, assistance in labor force training, hard and soft infrastructure provision, or a combination of other traditional economic development tools (Dinc and Haynes 1999). In that sense, to develop and support sound development policies, an understanding of the region's economic, cultural, and social structure is necessary.

Industrial Structure

Local and regional policymakers need to understand the industrial structure of their regions, that is, which sectors are the leading sectors in terms of volume of activity, output, or share of labor demand and which sectors are growing or declining regionally and nationally. For example, in the short term an industrial sector in a particular state may be "leading" in terms of volume of activity, value added, or share of labor demand, but if it is not operating efficiently compared with the same sector in other regions, sooner or later it will become uncompetitive and begin to wither away from external competition. Alternatively, a less dominant sector may be a better candidate for growth and development because of its competitive efficiency (Dinc and Haynes 1999).

Policymakers also need to understand how much a given industry, firm, or regional economy or the nation can increase its output without absorbing additional resources, thereby improving its competitive status. In that sense, efficiency becomes an important control parameter for assessing the utilization level of inputs in the production process. Just as the viability of firms in a

long-term competitive environment depends heavily on their efficiency, the overall efficiency or productivity of the economy of countries, states, or localities determines the general well-being of their people.

Another important issue related to efficiency and productivity is regional infrastructure. When designing, locating, and building infrastructure, focusing on its reproductive capacity is essential (Lambooy 1985). Such reproductive capacity is related to investment not simply in human capital and local research and development, but in the capacity to produce or reproduce that capital and expand research and development, so investment in and maintenance of institutions with these reproductive roles and the utilization of these institutions will generate the capacity to absorb and adapt to change. Thus investigators hypothesize that regional centers that have high levels of investment in, or a historically long-term pattern of support for, institutions with this role of generating reproductive capacity will do better than centers that have a thinner veneer of development.

Still another perspective is directly related to factors of production, and hence to efficiency and productivity. Realignment will be continual with respect to growth within regional systems of complex modern societies responding to underutilization of capital or human resources whether government policies intervene or not. In terms of capital and human resources, the scale of access to undervalued resources is important, as is the ability to either transform those resources into factors of production or use those resources in substituting for higher-cost production factors elsewhere. This substitution relates both to an urban center's region, that is, its character, resources, and factor utilization levels, and its ability to engage in labor capital substitution (Haynes and Dinc 2000). Government policies can be seen as a complement to these changes, easing transformations and maintaining investments for the future.

Social and Cultural Structures

Policymakers should know whether the social and cultural structures of the region or local community complement and support economic development programs. Local culture and political leadership need to have the economic strategy or the political will to implement a successful regional development process that will close the gap between the lagging region and the nation. Furthermore, the pattern of massive transfers from central governments to these peripheral regions has not been a successful strategy socially, politically, or economically. Hence regional and local policymakers need to pay close attention to these issues and to include them in their models.

Forms of government and political culture are closely related. The characteristics of political institutions develop in such a way as to coincide with the cultural characteristics of the local population (Higgins and Savoie 1995). This relationship has led, for example, to the recognition that all federal systems develop a flexible, nonlegalistic arrangement labeled cooperative federalism within which interactions between the core state and the region take place. Despite designs to the contrary, these federal systems are modified over time to fit the regional cultures they link together. For example, the original Canadian Constitution (the British North American Act) designed a centralized federal system, but because of cultural cleavages and a highly dispersed regional system, Canada has evolved into one of the most decentralized federations in the world. In contrast, in the United States an intentionally highly decentralized federal system was designed, but has evolved into a much more centralized system. This is only to say that culture matters and is reflected in the political and economic base of regionalism.

Local and Regional Leadership

A region's economic base and successful strategies of inclusion and of building bases for managing economic change have a close relationship. Effective leadership is a dynamic process driven by an interactive local elite. If the local or regional leadership is dominated by a single individual,

corporation, or even a single economic sector, however, such dominance will lead to defensive strategies of consolidation, growth through risk spreading, and market force insulation. Such dominance may lead to increased regional vulnerability and decreased responsiveness to new trends and changing global economic dynamics (Friedrichs 1986, 1987). The opposite would be, therefore, that diversity, range, and variety of regional economic leadership drawn from a wide economic base would produce strategic flexibility and more rapid responses to global trends and challenges.

Human Capital

Human capital can be broadly defined as the accumulation of knowledge and skills, and is seen as a major contributor to the well-being and living standards of individuals who possess it. The level of human capital or education determines not only the lifelong earnings of individuals, but also contributes to the general well-being of the society (Dinc 1999). In such a globalized, interdependent, borderless economy, human capital becomes a central differentiating asset between different regions and localities. It is an asset that is mobile, responsive to price differentials in wages, and, in the short run, this demographic reality is only augmentable at the margins. The quality of human capital is not simply a function of formal education and on-the-job training, even though that is extremely important. The quality of human capital is also related to occupation and work experience in an industrial structure. The capacity of human capital for retraining and acceptance of innovation is centrally important. The quality of human capital is also a function of age and gender within a specific cultural context that is often reflected in participation rates, but that differs from one region to the next (Haynes and Dinc 2000).

The rapid pace of technological development demands an increased input of human capital with more skills and knowledge and of related supporting capital investment. The highly competitive international and interregional economic environment forces firms to adopt new production techniques and to improve the productive efficiencies of their workers.

Environmental Issues and Local Economic Development

Environmental regulations and increasing public awareness have two important impacts on regional economies. First, heavy regulations could force firms to relocate into unregulated regions or nations, resulting in high unemployment in the regulated region. Second, sometimes exaggerated environmental problems may prevent useful investments. In such cases, both the region and the nation lose.

Many analysts sometimes have too much confidence in the Coase theorem, which states that market forces will internalize the externalities. However, no existing theorem guarantees that even a perfect market will lead to sustainable development and the preservation of life support systems (Haynes and Dinc 2000). Regional and local policymakers should increase the realism and relevance of their studies by incorporating ecological economic approaches to address growing evidence of environmental problems.

Public Sector and Regional Development

One consequence of public sector interventions is that they strengthen urban centers as the location of governmental decisionmaking, even if the purpose of intervention is quite the opposite. The quaternary sector cushions local and regional systems from the broad spectrum of changes in the global economy. This cushioning generates a basis for continued growth and steady, and sometimes high, returns on service-related investments. Under recent circumstances that have encouraged and led the shift to the service and information economy, the quaternary sector has

supplied strong growth leadership in capital regions. Difficulties lie ahead, however, for regional and local policymakers in terms of resolving the division of decisionmaking between markets and the public sector, as well as between central government and local governments (Harris 1995).

Dealing with the Issues of Regional and Local Economic Development

The issues discussed in the previous paragraphs are at the core of regional dynamics in the 21st century, and they require coordination and collaboration among relevant parties to develop problem-solving methodologies for dealing with them. They will require theory and application to go hand in hand, which requires continuing training of local and regional policymakers as well as of other stakeholders. In this changing and globalizing economic environment, if regional and local policymakers cannot develop and adopt new ways to deal with problems, they will not be able to keep pace with this rapidly changing world.

In addition, dealing with existing and potential problems and developing and implementing economic development programs necessitate a significant amount of data and information at the regional and local levels. It is therefore imperative that policymakers at the local and regional levels and officials of the statistical system develop close collaboration to determine what is needed.

Statistical Systems

As the previous sections showed, poverty reduction activities and sustainable development programs require a significant amount of statistical data and information, along with the capacity to analyze and use them in decisionmaking.[2] Three major means of collecting and producing data are available at both the national and subnational levels. The first is a formal process for statistical data collection that includes censuses and various surveys. The second is an administrative data collection (or production) system, which consists of line ministries and relevant agencies that collect data from the users of services including health and education services, and public revenue and expenditure data. The third is a system of participatory appraisal and qualitative processes that mainly complement the previous two. Of course, some other information systems and processes can be employed in the production of relevant data, such as environmental and land information systems, early warning and monitoring systems, and vulnerability assessment and mapping.

To some degree almost all countries employ these means to collect and produce data, although perhaps not systematically. Many countries do not collect subnational statistics systematically, and hence they are not available to the public. As noted earlier, to alleviate poverty and to develop sound local and regional economic development policies and programs, collecting, analyzing, and disseminating subnational statistics are essential. Local and regional policymakers must have the necessary capacity to use such data in their policymaking efforts.

Principal Elements of a National Statistical System

Subnational and national data are needed for policy formulation and evidence-based decisionmaking at the national, regional, and local levels. National statistical systems, generally central statistical offices, are responsible for collecting, processing, and disseminating statistical data by using existing human, physical, and organizational resources. The data produced by national systems support policy formulation and decisionmaking by governments, businesses,

2. This section on statistical systems heavily benefits from my earlier unpublished writings on the issue as well as my colleagues' unpublished works (reports) here at the Development Economics Data Group of the World Bank. I would like to thank Misha Belkindas, Graham Eele, and Neil Fantom.

citizens, and other local actors. In this process, where possible, subnational data enter the national statistical system following review by the central statistical office, which standardizes subnational data to produce consistent, national datasets. In addition to compiling and disseminating data, an important function of the national statistical system is to agree on standard definitions and methods of data collection and to provide opportunities for the exchange of information between national and international statistical agencies.

The nature and organization of national statistical agencies vary according to the political system, the demand for data, and the organization of local and central governments. In decentralized systems, separate agencies have independent mandates to gather and disseminate statistics in particular areas. Even in highly centralized systems, responsibilities may be divided. Central banks, for example, usually collect data on money and banking and may be responsible for other areas, such as the balance of payments. Line ministries may compile and disseminate data derived from their administrative processes. Hence, a national statistical system is generally a network of agencies whose activities are coordinated by legislation, administrative practices, and professional standards to avoid data discrepancies.

Official statistics, that is, those produced by statistical systems operated and financed by governments, have a dual role. First, they must serve governments' needs for efficient administration and management, as well as for longer-term policymaking. Second, they must also serve the public's need to monitor the activities of government. To be effective, statistical systems must have legitimacy backed up by legislation that provides safeguards of confidentiality for the providers of raw data and assurances of integrity and accessibility for users.

The Challenges Facing Developing Countries

Many national statistical systems are caught in a vicious cycle, in which inadequate resources restrain output and undermine the quality of statistics, while the poor quality of statistics leads to lower demand, and hence fewer resources. In most countries, subnational statistics are not even collected because of a lack of resources and inadequate capacity. Sustainable improvements to the statistical systems of developing countries require programs to increase both the demand for and the supply of statistics. In other words, the cycle must be broken, encouraging countries to develop the capacity to conduct sophisticated statistical activities reflecting their own agenda and to make better use of these data in managing their development programs.

In many developing countries, especially the poorest, statistical systems are under stress and are underperforming. They are unable to generate the data at the national and subnational levels that are needed to monitor government activities and support effective policymaking. Among the reasons for systemic failure are

- Budget cuts
- Inadequate investment in new technology, computing, and communications
- Poor performance of the statistical system
- Overdependence on donor finance
- Lack of training, career development, and motivation of statistical staff
- Inadequate feedback from users of statistical data
- Ineffective institutional framework, leadership, and management
- Lack of interest on the part of policymakers and government officials.

What Is Needed?

Developing countries have a long way to go and much more work to do to improve the quality of their statistics. The international development agencies' involvement in sustainable economic

development and poverty reduction creates an important opportunity for the improvement of statistical systems of developing countries. Working together with international partners through networks such as the Partnership in Statistics for Development in the 21st Century, countries can formulate programs to increase the capacity of their statistical systems. Such a concerted program should include all the following elements to succeed:

- Building demand and country ownership
- Assessing needs
- Engaging in strategic planning
- Making better use of existing data
- Training and new tools
- Funding investments in statistics
- Seeking international cooperation.

Building Demand and Country Ownership

One of the most important factors to break the vicious cycle is to increase the demand for data at the national, regional, and local levels. Ownership is central to increasing the demand for statistics. Once governments at the national and local levels understand why statistics are important and recognize the value of an effective and efficient statistical system, investments in statistics are likely to be sustained. Any attempt to build capacity and increase the supply of data must take into account how demand is changing and what needs to be done to strengthen the capacity of governments and the private sector to use data effectively. Another important step is to disseminate the data and help statistical managers in developing countries use it in their interactions with policymakers, politicians, and other data users.

Even when the demand for improved statistics is clear, donors and government decisionmakers often do not know which problems to tackle first or how to take advantage of available technical and financial resources. This requires collaboration between donors and recipient countries. These collaborative efforts should provide countries with needed information on best practices and help with assessing needs, measuring existing capacity, identifying gaps in data production, and setting up a statistical master plan linked to the national development plan.

Assessing Needs

The purpose of needs assessment activities is to identify both short- and longer-term interventions to develop and strengthen the collection, processing, and dissemination of national and subnational statistics. Needs assessment also includes determining needed improvements in the use of existing data. The emphasis will be on improving the supply of data to meet the needs that have been identified for both policymaking at both the national and subnational levels. The data generated by national statistical systems must meet reasonable standards, hence needs assessment activities should include the review of such standards. Needs assessment activities should bring together suppliers and users of the data, and during the process all key stakeholders need to be consulted (the key stakeholders include central and regional statistical offices, local governments, representatives of civil society institutions, and universities).

The strategy is built on two main building blocks. The first is the assessment of current and anticipated future demands for data that will be needed for poverty reduction and sustainable development strategies. The second is the assessment of the strengths and weaknesses of the existing national statistical system in terms of national and subnational statistics collection. In particular, the strategy should build on existing strengths, address specific weaknesses, and identify the important tradeoffs between what is desirable and what is feasible.

Before starting the needs assessment activities, an evaluation instrument (minimum required benchmarks) that will provide guidelines in assessing the needs should be developed. By setting the baseline for evaluation, these benchmarks will also allow countries to identify progress throughout the project. In addition, clearly defined benchmarks can also be used as a self-evaluation tool for the participant countries.

Needs assessment activities should include the following:

- *Preparation of a needs assessment report*. The purpose here is to ascertain the current situation and to assess the strengths and weaknesses of the statistical system in subnational statistics collection. It also determines whether the statistical system provides the data needed for poverty monitoring at the local level. The report sets goals and targets, which specify what the system is going to achieve within an agreed timeframe and a cost structure. It also includes priority action areas to achieve the targets, including the training needs of local policymakers in the use of data. In addition, the report should include mechanisms to monitor progress and to keep all stakeholders informed.
- *Needs assessment workshops.* A needs assessment workshop should be held to discuss the draft needs assessment report before finalizing it. The participants at the workshop are policymakers and users of data at the national and local levels, staff from statistical agencies, and other stakeholders. The goal of the workshop is not only to discuss the draft needs assessment report, but also to facilitate the interaction between data collectors and data users and sensitize all stakeholders to the importance of statistical data for better policymaking. The sharing of the needs assessment report is essential for achieving sustainability. It stimulates public debate on and broadens the understanding of development issues, and it enhances transparency and accountability in the development process. It also strengthens public support for efforts to improve local government management structures, facilitates collaboration among the many parties involved in the process, and improves the quality of coordination between different projects in the field.

An important issue to be taken into consideration at an early stage of the needs assessment activities is the timeframe to be used for the strategy. Although concentrating on short-term needs of data users at all levels is important, many statistical activities take place over a longer cycle. To deal with both aspects, following a sequenced information strategy, the report should address both short- and long-term needs accordingly. In general, the short-term focus will be on meeting the immediate data needs for poverty reduction, mainly by making better use of existing data systems and helping to improve dissemination and analysis. Improving existing data systems by reducing delays in publications, by strengthening analysis, and by widening dissemination can help to improve the image and public standing of the statistical system, which will help build a constituency for more investment in the future. In the longer term, the emphasis should be more on making appropriate investments to develop new data systems and to address constraints in human resources, equipment, and management systems.

Engaging in Strategic Planning

Once the needs assessment activities have been completed and the needs assessment report has been finalized, countries should develop their own statistical master plans, including a subnational statistical component. Even though the master plan will build on the needs assessment activities, its goals and targets will be medium- and long-term improvements of the statistical system. These activities should ultimately result in a sustained increase in statistical capacity in developing countries, financed mainly by national budgets and supplemented where needed by donor funds. Development of statistical master plans should

- Involve all stakeholders, including donors
- Use internationally accepted frameworks for prioritizing statistical activities
- Move from a project approach toward program funding for statistics
- Develop mechanisms for regular consultations between stakeholders.

Making Better Use of Existing Data

The use of existing data involves both the demand and supply sides of statistical data. In many cases, the needed information may already exist or could be generated by existing data systems at relatively low cost instead of planning a new survey or other data collection exercise. Many countries have collected data that has never been analyzed, or even processed. Unlocking existing data, which could at least partly meet users' demands, could generate significant information.

The demand side involves national and local policymakers making greater use of available data, and includes designing a training program for policymakers. This program would provide data users at both the national and local levels with a broad base of contemporary knowledge in the use of existing subnational data for better policymaking and management. Training areas for the data users should be determined during the needs assessment activities, and the design of the training program should be based on the recommendations of the needs assessment report and statistical master plan. More likely, the training program may include standard analytical methods that are data driven and will expose data users to innovative approaches at the intersection of economic, social, and spatial analyses, giving participants a flavor of intersectoral linkages central to effective local government management.

Training and New Tools for Data Collection and Analysis

Statistical processes and tools, perhaps more than anything in the field development, lend themselves to broad application, often with only minor regional or country adaptation. Data collection activities are not cheap—especially large-scale surveys and censuses—and many of them must be paid for from government budgets already under considerable strain. Thus the use of proven methodology and tools developed by the World Bank and other agencies and based on the latest information and communication technology is both cost-saving and effective, and many countries could be helped to take advantage of these opportunities.

Training activities should focus on improving the skills of relevant staff at central and regional statistical offices that are required to undertake activities to achieve short- and long-term goals identified in the needs assessment report and statistical master plan. The focus of the training will most likely be on collecting, processing, and disseminating subnational statistics and will include, but not be limited to, training on

- The design issues of subnational statistical systems
- The coordination and implementation of fieldwork and data collection processes
- The use of monitoring mechanisms over time
- The use of various quick surveys and related techniques in subnational statistics
- The use of administrative data as a data collection method and coordination and collaboration with other relevant agencies
- The development and implementation of quick surveys for checking the accuracy of administrative data
- The analysis and use of existing data
- The use of various dissemination methods with an emphasis on the use of the Internet as a dissemination tool.

Given the rapid growth of Internet access across the world because of the increasing availability of service providers and declining service costs, the Internet has become an important tool for data dissemination. Therefore developing training programs to improve the skills of relevant staff in this area is imperative.

Financing for Statistics

Financing the activities of the national statistical system is essentially each country's own responsibility, and funds should be allocated from the national budget, but for poor countries to make substantial improvements in their statistical systems, significant external financial resources will be needed. At the Monterrey Conference on Financing for Development, participants agreed that increased resources for development and poverty reduction should be targeted at countries with effective policies and institutions. The resulting Monterrey Consensus thus puts strong emphasis on strengthening the institutions of government. The ability to provide regular, reliable data on the economy and the well-being of the population is an important indicator of good policies and institutions. Disseminating good data increases transparency and promotes accountability. It also complements important processes such as budget management and auditing. Therefore countries that commit themselves to meaningful reforms of their statistical systems, accompanied by well thought out plans and commitment at the highest level of government, should receive increased support from the World Bank and its partners in networks such as the Partnership in Statistics for Development in the 21st Century.

Working with the International Community

Managers of national statistical systems should maintain close relationships with international agencies and networks that are involved in statistical work, because further work is needed to develop frameworks and standards and update existing ones. The International Monetary Fund's general data dissemination system and the data quality assessment framework, as well as other established frameworks for economic and financial statistics, are valuable tools, but they need to be used regularly to develop expertise in developing countries. As countries take more control over the development of their statistical systems, and as the international community becomes more reliant on their outputs, having agreed-upon processes and standards for describing how statistical systems operate and the extent to which they follow good practice will become increasingly important.

In general, better coordination among the main international organizations and data producers and managers in countries is needed to sustain a well harmonized, internationally agreed set of data, which is up-to-date, easily accessible, and complete with metadata and other documentation. The coordination of the statistical activities of the United Nations and its specialized agencies, such as the United Nations Educational, Scientific, and Cultural Organization and the World Health Organization, and other international organizations, such as the International Monetary Fund and the World Bank, takes place in a number of forums, with the United Nations Statistical Commission as the highest governing body. Day-to-day coordination issues, however, are generally left to managers and officers-in-charge to sort out and to agree on implementation details. This process has worked well, but would benefit from more formal recognition and better channels of communication.

Conclusion

Poverty reduction; sustainable national, regional, and local economic development; and statistical data are interwoven components of overall government efforts in improving people's well-being.

Governments at all levels share the responsibility of creating an enabling business environment and providing required public services to maintain sustainable development and reduce poverty. Developing policies and programs for this purpose greatly depends on governments' knowledge about their jurisdictions. Such knowledge is only possible if the national statistical system has the capacity to collect, process, and disseminate timely and good quality data at the national and subnational levels.

Without a well-functioning statistical system with strong country ownership, producing reliable and timely statistical data would not be possible. A lack of good data will, in turn, prevent the development of sound policies and programs for economic development and poverty reduction and, hence, poor countries will not be able to break the vicious cycle they have been desperately trying to escape. An important factor in breaking this vicious cycle is local analytical capacity to use available data, which represents the demand side of these interwoven activities. This requires close collaboration between local data users and relevant statistical agencies.

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3

Bulgaria

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This chapter summarizes the findings of a larger report, "Subnational Statistical Capacity Building, Bulgaria Country Report: Needs Assessment of Subnational Governments" prepared by Club "Economika 2000" for the World Bank Institute. The goals of the report are first, to identify problems in the information flows and data needed by the subnational governments, and then to formulate recommendations for resolving these problems.

The project was implemented from March 1 to April 30, 2002. The data collection, site visits, and meetings took place during the first three weeks of March. Later, four interim reports were submitted to the World Bank Institute.

Subjects studied in this report are

- The environment in which the subnational governments implement their policy, including the legal background and interinstitutional relations
- The policies implemented by the subnational governments and their relation to the information provision
- The flow of information from the central and subnational data producers to the subnational institutions that use the data to implement effective and efficient local policy.

The study focused on the following groups:

- The Ministry of Finance (MOF), the Ministry of Labor and Social Policy (MLSP), and the Ministry of Education and Science (MES) at the central level.
- Two regional administrations, the labor offices (LOs) and the regional tax offices (RTOs) servicing the subnational governments. The regional administrations of Razgrad and Montana were subjects of the survey, as were three municipalities from Razgrad, Loznitza, and Tzar Kaloyan in the Razgrad region and Montana, Berkovitza, and Boychinovtzi in the Montana region.
- Other institutions created for data collection and provision: the National Statistical Institute (NSI) at the central level and the regional statistical offices (RSOs) in both regions.

Through site visits and meetings with representatives of the institutions and subnational governments, analysts learned what data the subnational governments use and what additional data they need.

The team encountered unexpected problems in the survey of the regional and local entities. One of the regions (Stara Zagora) had to be substituted for Montana at the last minute because the regional and local institutions in Montana were not ready.

General Description of Decentralization

Decentralization is a process that is currently unfolding in Bulgaria. This section describes the role local governments play so as to understand their emerging information needs.

Subnational Local Governments

Two subnational administrative government tiers exist in Bulgaria: regions and municipalities (see table 3.1).

The region (*oblast*) is an administrative unit of the central government. It comprises one or several neighboring municipalities. In the case of the capital city Sofia, two subnational governments (a regional administration and a municipality) operate in the territory of the city. Regions can be created and liquidated only by law. A regional governor is appointed by the Council of Ministers (at the central government level); no elected positions exist at this level of government. The 28 existing regions were established by splitting the 9 regions that existed before 1999.

According to the Constitution, the municipality is the main (and, by now, the only) tier of local self-government. The municipality comprises one or several settlements, and its area comprises the territories of the component settlements. The municipality is named after the administrative center and is a legal entity. It has its own independent budget and property, which can be used to serve its interests. The bodies of local government—the municipal council and mayor—are elected directly by the population of the whole municipality. Bulgaria currently has 262 municipalities, and 1 additional municipality is being established. Although municipalities can, by law, be split and merged, their number tends not to change much. Seven new municipalities have been established in the past five years.

The municipalities can have their own structural units, districts and mayoralties. Districts can be established in large cities (population over 100,000) based on the decision of the municipal council, and are required by law in larger cities (population over 300,000). Currently only the capital city Sofia and the second and third largest cities have districts. The number of these districts is as follows: Sofia, 24 districts; Plovdiv, 6 districts; and Varna, 5 districts. The mayoralties can be established by decision of the municipal council, and they comprise one or several neighboring settlements. Bulgaria currently has 1,696 mayoralties. The number of mayoralties varies depending on the policy of municipal councils.

Table 3.1 *Characteristic Features of Subnational Governments in Bulgaria*

Subnational local government	*Region*	*Municipality*
Number of units	28	262
Average territory (square kilometers)	3,965	422
Minimum territory (square kilometers)	1,300	44
Maximum territory (square kilometers)	7,700	1,367
Average population	284,774	30,000
Minimum population	131,000	1,300
Maximum population	1,174,000	1,174,000
Average number of settlements	191	22
Minimum number of settlements	38	1
Maximum number of settlements	478	134
Average number of municipalities	9	n.a.
Minimum number of municipalities	1	n.a.
Maximum number of municipalities	22	n.a.
Nature of subnational level	Deconcentrated state administration	Local self-government

n.a. Not applicable.
Source: National Statistics Institute data.

The municipal councils and the mayors of municipalities, as well as mayors of mayoralties, are directly elected by the population. Nevertheless, the link between local government representatives and the population is not good for the following reasons:

- The municipal councilors are elected from a list of candidates prepared by each political party based on a proportional system. The settlements are generally underrepresented in the municipal council, because most names on the party list come from the largest municipality.
- The municipalities are extremely centralized units. The settlements, some of which have mayoralty status, have extremely limited powers. Most of the financial resources are directed to the central settlements of the municipalities.

Local governments' limited powers to set local revenues, as well as the persistent deficit in municipal budgets, do not create conditions for effective dialog or the possibility for the population to influence local priorities.

Authority and Responsibility of Subnational Local Governments

The regional administration is a deconcentrated state authority at the regional level. It has three main functions: to manage the state properties on the territory of the region, to monitor whether the decisions of the municipal council comply with law, and to implement state policy at the local level. In addition to their controlling function, which is intended mainly to combat and curtail corruption, the regional administrations were formed to foster development and to unite municipalities to work together on large-scale projects and for a common cause.

Municipalities are the only self-governing subnational structures. They have independent budgets and provide public services to their populations.

The municipalities have limited powers for setting local revenues. The National Assembly has the power to determine the types of taxes, fees, and intergovernmental subsidies, the revenues from which go to the local budgets. Laws regulate the following items:

- The tax basis, the tax rates, and the shares of local and state taxes that go to local budgets
- The exact amount or the range in which the municipalities can set fees
- The level of intergovernmental subsidies.

The municipalities do not have the power to introduce new local fees except the fees explicitly determined in the Local Taxes and Fees Act. For other provided services they can determine prices, but the price must include value added tax, which makes the services expensive for consumers. The local governments only have the power to determine the rate of the solid waste fee, which is based on the tax basis used for the property tax. The municipalities determine the exact amount of the other fees within legal limits, except for the administrative fees, whose rates are regulated by law. The municipalities are free to determine the amount of revenues they will derive from local activities such as rents, prices of services, and sales of real estate and other property.

The municipalities have the power to seek financial resources from external sources, such as borrowing from banks, issuing bonds, and other means. Funds from external sources should amount to no more than 10 percent of all revenues. The municipalities can invest up to 5 percent of local revenues and shared taxes (as of 2002 this share increased to 25 percent of local revenues).

In 1991 the tax collection offices passed from local to central subordination. The Tax Administration Division was established under the MOF, which is responsible for collecting all municipal revenues. However, in early 1998 the Local Budgets Act gave the municipalities the right to collect the revenues from local fees.

The municipalities have various powers in relation to the provision of public services. In some spheres the state delegates to the municipalities the partial performance of some state-level activities, such as recruiting soldiers, holding elections, registering the population, and organizing land committees. The municipalities have extremely limited power to provide major public services in the fields of education, health care, and social assistance and only partial power in the fields of culture, the environment, housing construction supervision, and some economic activities.

In these activities, the line ministries have the right to determine which institutions should receive funding and to distribute funds from the central budget or municipalities to these institutions. Line ministries also have the right to open or close institutions (schools, hospitals, and so forth). They determine unified scales for wages, as well as the number of staff. Decisions to appoint directors in municipal hospitals and schools are also made at the central level. The municipal responsibilities regarding these activities are limited to financing.

The municipalities are fully responsible for providing certain public services, such as some in the fields of public utilities, culture, and economics, and are partially responsible for some services in the fields of education (kindergartens) and social activities (meals on wheels, soup kitchens, and so forth).

Intergovernmental Fiscal Relations

Intergovernmental transfers account for the bulk of municipal revenues—about 80 percent in recent years. They are divided in two major parts, shared taxes and intergovernmental subsidies. The most important shared tax revenues are

- Personal income tax—revenues are distributed 50 percent to municipal budgets and 50 percent to the central budget.
- Corporate income tax—10 percent of companies' taxable profits goes to local budgets.

The shared tax revenues go to the municipal budgets as general revenues without special requirements for financing particular services or types of expenditures.

Intergovernmental subsidies consist of general and targeted subsidies. The general subsidies are provided to the municipalities without restrictions. The targeted subsidies are provided for specific, set purposes. The share of extraordinary subsidies has increased in recent years. Most of these subsidies are accounted for as general subsidies, but in practice they are granted with detailed expenditure guidelines. The extraordinary subsidies are not allocated based on the formula presented below. They are granted to the municipalities in the course of the fiscal year based on vague criteria and generally aim at supporting the municipalities in difficult financial situations.

The formula for allocating intergovernmental subsidies is extremely complicated and changes every year. In 2001 the subsidy allocation formula had the following form:

$C =$	$P\,[(C1 +$	$C2) -$	$C3] +$	$C4 +$	$C5 +$	$C6$
Intergovernmental subsidy	Wages, social security, and scholarships	Social benefits	Tax revenues + half of the nontax revenues (municipalities, nonregional centers)	Subsidies, set based on objective criteria	Redistribution element	Targeted capital investment subsidies

The *C1* elements include the full amount of funds for wages, social security, and scholarships, and *C2* includes the full amount of social benefits. These expenditures are the so-called mandatory

ones. For the municipalities, which are not regional centers, the amount of these expenditures is compared with the tax revenues planned by the MOF plus half of the nontax revenues reduced with the revenues from the resort fee—*C3*. The *P* element—the sum of the first three elements ($P = C1 + C2 - C3$)—can be

- A positive value for the municipalities in which the mandatory expenditures ($C1 + C2$) are higher than the tax revenues (+ half of nontax revenues for most municipalities) or
- A negative value for the municipalities in which the above ratio is reversed.

Thus the *P* element turns out to be a redistribution mechanism.

The *C4* part of the subsidy is based on differences in the expenditure needs of the municipalities. In practical terms, it is intended to cover the remaining current expenditures and is determined based on 15 objective criteria. The *C5* element is directly related to *C4*. It redistributes part of the subsidy by attempting to provide a minimum share of the maintenance compared with the mandatory expenditures ($C4/C1 + C2$). All municipalities whose shares are below the median for the country receive additional subsidies to bring them up to the median through *C5* (17.5 percent for 2001). The *C6* element provides capital investment subsidies.

Allocation of the Financial Resources by Tiers

Bulgaria's public sector consists of three government tiers: central, regional, and local. The regional tier consists of 28 administrative, deconcentrated units of the central government, which do not provide public services. The budget of the regions is determined by the central government and the funds are used for the operation of these units. The budget of the regional administrations is 0.1 percent of consolidated public expenditures and 0.04 percent of gross domestic product (GDP). Table 3.2 presents the share of municipal budget expenditures in the consolidated state budget and GDP.

Significant changes in the amount and the share of municipal expenditures are monitored in relation to two functions, education and health care. The municipalities financed about 70 percent of educational expenditures in the first half of the 1990s. In recent years this share has dropped to 55–57 percent. The change reflects the fact that the expenditures of the secondary professional schools and the schools for disabled children started to be financed from the central budget. A similar trend is seen in the area of health care expenditures. Local government expenditures on health care are declining in both absolute terms and as a share of the budget because of the gradual introduction of a health insurance system, which started in 1999. Analysts expect that when the health insurance system has been fully implemented in 2003, municipal expenditures for health care will be about 15 percent of total expenditures.

Municipal revenues are funded from two main sources, state transfers and local revenues. Table 3.3 shows the proportion of the municipal budget coming from intergovernmental transfers. In 2000, intergovernmental transfers accounted for 79 percent of total municipal revenues.

Table 3.2 *Share of Local Expenditures in the Consolidated State Budget and GDP, 1991–2000*
(percent)

Indicator	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*
Local budget/GDP	10.95	13.04	11.30	9.24	7.71	6.34	5.79	7.70	8.14	7.88
Local budget/consolidated state budget	21.43	24.29	20.15	16.98	15.70	14.52	16.31	19.12	18.71	17.70

Source: National Association of Municipalities in the Republic of Bulgaria and the Ministry of Finance.

Table 3.3 *Share of Intergovernmental Transfers in Municipal Budget Revenues, 1996–2000*
(percent)

Revenue item	*1996*	*1997*	*1998*	*1999*	*2000*
Total intergovernmental transfers	78.80	90.31	82.83	76.79	79.03
Subsidies (net)	32.75	34.79	36.61	35.92	40.66
Shared taxes	46.05	55.52	46.22	40.87	38.37

Source: National Association of Municipalities in the Republic of Bulgaria.

Intergovernmental transfers consist of subsidies, which accounted for 51 percent of total transfers, and shared taxes, which accounted for 49 percent of total intergovernmental transfers. The composition of subsidies in 1999 was as follows: general subsidy, 60.7 percent; targeted social assistance subsidy, 8.7 percent; targeted capital investment subsidy, 10.6 percent; extraordinary subsidy, 22.1 percent; contributions to the central budget, –2.1 percent. The composition of subsidies in 2000 was as follows: general subsidy, 40.7 percent; targeted social assistance subsidy, 11.1 percent; targeted capital investment subsidy, 10.2 percent; extraordinary subsidy, 40.8 percent; contributions to the central budget, –2.8 percent.

Local own-source revenues come from three main sources: local taxes, local fees, and other local revenues (from local activities such as rents, sales, and fines). Table 3.4 presents the structure of local revenues.

Borrowed funds are derived from several sources: the issuance of municipal bonds, loans from financial institutions, interest-free loans from the central budget, loans between municipalities, and loans from off-budget funds. They are not a significant source of revenue for local budgets: in 2000 their share was only 3.5 percent. In practice Sofia accounts for 81 percent of borrowed funds and the largest municipalities account for 17 percent.

Decentralization and the Need for Subnational Statistics

The decentralization process in Bulgaria is not finished. The responsibility of regional administrations is limited and encompasses only organizing local entities to draft programs and strategies for regional development and employment. The regional administrations generally need more information about their component municipalities, including detailed descriptions of all projects, approved and not approved, along with analyses of the reasons why projects were not approved. Municipalities' needs in the future will depend on their actual responsibilities in the intergovernmental structure.

Table 3.4 *Structure of Own-Source Local Revenues, 1996–2000*
(percent)

Revenue item	*1996*	*1997*	*1998*	*1999*	*2000*
Total local revenues	19.28	9.35	15.86	18.19	17.47
Local taxes	5.36	2.03	4.95	4.43	4.40
Local fees	4.85	3.16	6.21	6.13	6.69
Other local revenues	9.07	4.16	4.70	7.63	6.38

Source: National Association of Municipalities in the Republic of Bulgaria. Local own-source revenues accounted for 17.5 percent of local revenues in 2000. Local fees accounted for 38 percent of total own-source revenues, other local revenues accounted for 37 percent of total own-source revenues, and local taxes accounted for just 25 percent of total own-source local revenues.

As self-governing structures, municipalities have much greater decisionmaking powers to conduct local policy than regional administrations. They draft independent budgets and have legal revenue sources and responsibilities for providing local services. Their responsibilities, however, are limited when measured by the indicators related to revenues and expenditures. The scope of local powers for conducting independent policy through the budget is limited to 15–20 percent of revenues and 30 percent of expenditures.

The restricted power of the subnational governments to implement independent policy means that their current needs for statistical information are limited, but their requirements will expand in the future. The decentralization process will continue, as demonstrated by the signing of an agreement between the government of Bulgaria and the National Association of Municipalities in the Republic of Bulgaria (NAMRB) to draft a fiscal decentralization program. Drafting plans for decentralization will require up-to-date information about the current situation and ways to estimate the consequences of any reforms undertaken.

Another factor that forces municipalities to use subnational statistical information is the severe financial problems they face. Municipalities need to collect information to make and justify proposals for changes in the negotiations between the ministries (mainly the MOF) and NAMRB. Two years ago, NAMRB created its own database, which is updated through the voluntary provision of quarterly and annual budget performance reports for all 262 municipalities in the country. The survey of municipalities proved that the demand for additional information is large, primarily because they are responsible for all basic social and economic processes in their respective municipalities and for providing basic public services to their populations.

The enhanced need for using subnational governments' information is determined, in part, by the increasing opportunities for coordinated policies and programs within regions in Bulgaria supported by European Union preaccession funds. The financing from these funds will turn the current formally elaborated regional and local programs into real factors influencing the social and economic development of regions and municipalities.

Information Flows among Institutions

Figure 3.1 shows the information flow among institutions. The rows represent the information producers, the columns represent the information users, and the Xs indicate the typical connections. Flow is from producers to users. The most important institutions in the system of subnational information flows are the NSI and its regional units, the RSOs; the MOF and its tax offices; the MES; the MLSP and its regional units, the LOs; the regional administrations; and the municipalities.

The National Statistical Institute

The main institution of the national statistical system is the National Statistical Institute. The NSI ensures the international exchange of statistical data with a number of international organizations. The data are provided at the national and regional levels. They are used to elaborate the National Plan for Economic Development, the Nomenclature of Territorial Units for Statistics. The NSI distributes most information through annual statistical publications. It also provides information on some indicators every quarter. In 2001 some information was provided sporadically because of the adoption and implementation of various acts that meant that the NSI had to provide data to municipalities and regions upon their specific requests. The NSI does not publish or announce regional data without a prior official request.

The RSOs are the NSI's divisions. They provide information to regional administrations for elaborating development plans and employment programs and to municipalities for elaborating development strategies and drafting budgets.

Figure 3.1 *Information Flows from Data Producers*

MAIN STAKEHOLDERS	DATA USERS	CENTRAL INSTITUTIONS				REGIONAL INSTITUTIONS		LOCAL INSTITUTIONS		
	Data Producers	MOF	Ministry of Education	Ministry of Labor and Social Policy	National Statistical Institute	Regional Statistical Offices	Regional Admin-istration	Munici-palities	Regional Tax Offices	Labor Offices
CENTRAL INSTITUTIONS	Ministry of Finance		X	X	X		X	X	X	
	Ministry of Education	X			X			X		X
	Ministry of Labor and Social Policy	X			X		X	X		X
	National Statistical Institute					X				
REGIONAL INSTITUTIONS	Regional Statistical Offices				X					X
	Regional Administration	X			X	X				X
LOCAL INSTITUTIONS	Municipalities	X	X	X	X	X	X		X	X
	Regional Tax Offices	X			X	X				
	Labor Offices				X	X				

The RSOs can only make information available after the data have been processed by the NSI and returned. Thus the RSOs gather information for the year and send it to the NSI. The NSI processes and returns the data to the RSO (after exactly a year). The NSI "cleans" the data and corrects the data to eliminate double counting of indicators by municipalities and regions. Only then can the RSOs release data for the Nomenclature of Territorial Units for Statistics II region, the administrative regions, and the municipalities. Frequently the RSOs find technical errors in the returned data. Not only does the RSOs' verification consume resources and postpone the provision of the data, but so do the delays entailed in reporting errors to the NSI and having them eliminated at the central level.

The RSOs' problems affect not only RSO employees, but also all data users in the relevant regions, and particularly the best and most reliable users: municipal and regional administrations. The municipal and regional administrations, the RSOs' main clients, cope with the situation by adding the needed data themselves based on their own information. On the one hand, this addition requires resources and time, and on the other hand, there is no guarantee that the data are correct and adequate. The information provided to the regional administrations overlaps significantly with that provided to the municipalities, because the indicators and breakdowns are identical.

Ministry of Education and Science

Information flows between the MOF and MES pertain to the drafting of municipal budgets in the education sector. The MES also uses NSI data for indicators related to the education sector. The MES uses the information from the municipal administrations, because they are the major information providers about the municipal level.[1]

The reliability of the data obtained from other central institutions (MOF and NSI) is not checked. The data obtained from the municipalities are not totally trusted, so their reliability is checked against data provided from central institutions. Although this lack of trust is an exception (albeit an important one), it necessitates additional checking, which increases the cost and reduces the effectiveness of data collection and processing.

The MES provides municipalities with data for these indicators to help them determine the number of staff in the educational institutions and the average wage. Practically speaking, such staff and wage requirements are obligatory for the maximum number of staff in the educational institutions, and wages are set by the central government.

The way in which the MES collects information to be provided at the central level differs from that at the local level. The data for the MOF are specially collected and comply with the particular user's requirements. The information provided to the municipal administrations is collected and processed on the basis of reports provided by the regional educational inspectorates (which are subordinate to the MES) and according to government regulations on the number of staff in the budgetary organizations and the average wage in those organizations.

A substantial peculiarity of the information flow generated by the MES is that the information gathered is partially accessible to the public. A citizen or institution needs only an authorization from a responsible MES official to access the information.

Specifically, the MES directly provides data to the central and subnational governments. The institutional users receive the data necessary for developing and conducting their policy not from

1. All kindergartens, primary schools, and most secondary schools are financed by municipal budgets. The municipal administrations collect and process data for these educational institutions and submit them to the MES. The municipalities provide the NSI with data for all educational institutions (state and municipal). The ministry compares data on the municipal educational institutions provided by the NSI and the municipalities.

the NSI, but directly from the MES. The NSI is bypassed and is not provided with these data. Society at large does not have access to the data. The information flows are comparatively routine and not very frequent. The MES provides mainly annual data. Data are only generated upon request for the MOF. These requests require special efforts on the part of the MES. Data are provided on time.

Most of the information is submitted on paper, which

- Reduces the speed of data delivery, because it would be quicker to send an e-mail than a letter, or what is often done, catch a bus from elsewhere in the country to go to Sofia to personally submit the required information
- Requires additional time for data processing by users
- Increases the risks of making mistakes, because when people have to add up many figures using only a pencil, or at best a calculator, mistakes do occur that would be less likely if they had access to software.

Due to the weak information flows generated by the MES, the users (MOF, MLSP, and the municipalities) do not have special claims to MES as a data provider. Sometimes the users have to call MES officials to obtain data or to define the scope of the required data more accurately.

The fact that information may be obtained from the MES in several different ways (written requests, telephone calls, special meetings, and official requests) indicates that the information flow is not highly regulated. Furthermore, the fact that the municipalities make written requests to the MES to get needed data indicates that this public information is not sufficiently accessible.

Ministry of Labor and Social Policy

The information requested and received from the MOF is related to three functions: drafting projections for the anticipated performance of the current budget; developing the draft budget and the budget of the social assistance system; and justifying in financial terms the drafts of legal acts and government regulations, strategies, programs, and action plans. To support these functions, the MOF provides the MLSP with data about the beneficiaries of social benefits, the clients of various social service institutions, and the current and capital expenditures of the institutions providing social assistance.

The MLSP also receives annual summarized data from the NSI. The NSI produces this information based on data obtained from the municipal social assistance offices, which are the main information providers at the local level.

The data for the indicators provided by different institutions (municipal social assistance offices and the municipal administrations at the local level and the MOF at the central level) differ. This difference causes many disputes among experts from the various institutions (mostly from the MLSP and MOF) in drafting the budget for social assistance. The MOF usually has the final word in these disputes, and the local budgets are drafted according to the information used by the MOF.

Delayed provision of requested data is the main weakness of the information flow from the municipalities to the MLSP. Not enough computers in the municipal social assistance services and the use of obsolete software cause these delays. Local administration representatives indicate as well, however, that the MLSP sometimes fails to provide the requested information on time.

Apart from the regular (usually monthly) reporting, data are also gathered in response to special requests. Special requests result from specific needs for operational information and the data to support it.

The cycles of information delivery to central and local users vary. Municipalities are given monthly and annual data, whereas the MOF, apart from monthly and annual data, also receives

information in response to special requests. Thus separate efforts are made to meet the needs of the MOF.

An important and characteristic peculiarity of the information flows is that they are partially accessible to the public. A special authorization from an MLSP or National Social Assistance Service (NSAS) official is required to release information to outside institutions and people.

According to the self-evaluation of the MLSP's capacity to collect and provide statistical data, the most serious problems are related to equipment (hardware and software) and Internet access in the MLSP and the NSAS and its local structures (municipal social assistance services, or MSASs). For example, because of poor telephone connections and the unavailability of providers in remote areas of the country, municipalities do not have Internet access and cannot use e-mail.

The MLSP asserts that, as a rule, it provides users with the required information on time. This assertion contradicts the opinions of the representatives of the municipal administrations, who report that the MLSP does not always provide the required information on time.

The main problems are (a) the data on social assistance produced by the MLSP (based on MSAS information) and by the MOF are contradictory; (b) in the opinion of the surveyed municipalities, the MLSP does not always provide the required data on time; (c) sometimes the users (MOF, municipalities) have to call the officials from the MLSP to obtain data or to define the scope of the required data more accurately; and (d) when the MLSP provides the data as hard copy, serious errors tend to occur.

Ministry of Finance

The MOF receives data from the ministries, the NSI, and subnational units (such as tax offices). These data are used to set subsidies, make projections for the budget, and help the municipalities determine the wages of mayors and chairs of municipal councils.

The municipal information used is provided through periodic reports on municipal budget performance—detailed quarterly and annual information and brief monthly information. The municipalities also provide the MOF with data for the coming year's municipal budget plans. The budget plans contain data for the municipal projections of the budget parameters, as well as the amount of the state subsidy they need. The information flows for the municipal revenues (tax and nontax) are duplicated, and the MOF receives data from the municipalities and the tax offices.

The quality of data obtained from the municipalities is inadequate and often late.

The information flow between the municipalities and the MOF is the most frequent, because the municipalities have the greatest need for data collected and processed by the MOF when drafting their independent budgets.

For budget planning at the beginning of the year, the MOF provides data to the municipalities officially in the form of a periodic report of the ministry according to an approved format. During the year the MOF sends information to each municipality on the amount of the subsidy received.

When examining the specific problems related to the information flows to and from the MOF, analysts identified the following six shortcomings.

- The information on similar indicators from various institutions (for example, from tax offices and from the municipalities) differs.
- The information provided by the NSI is not detailed enough, is not up-to-date, and often contains errors.
- The MOF receives only paper versions of the data; no electronic data are provided.
- MOF data are sometimes incorrect and often late.
- Modern communications equipment is not used.
- The information is inaccessible to the general public.

Regional Administrations

Regional administrations are deconcentrated central government units that have limited functions. Their budgets are formed entirely from subsidies, and this dependence explains the lack of information flows from the MOF to the regional administrations.

Regional administrations need information about active labor market policies conducted by the MLSP because of the high rates of unemployment in the regions, and also because regional administrations are stakeholders in resolving the problem of unemployment. (According to the legislation, regional employment councils and regional development councils are created and operate under the regional administrations.)

Two data-related problems can be identified here: (a) the monthly bulletins from the employment agency about the labor market are typically delayed one to two months, and (b) the data about municipal labor markets published on the Internet have not been updated since 1998. Obviously these problems affect the utility of this widely used public information. Besides this, the regional administrations do not have a legal right to collect the current and operating information that is used to maintain the diverse and up-to-date database. The database is needed for drafting strategic and operational documents related to the management and development of a certain region and projecting proposals for applying for aid to foreign donors.

The most intensive information flow relates to the development of the regional development plans and strategies, a function led by the regional governors. All municipalities from the relevant region participate through their representatives in the regional development council and provide a wide range of information characterizing the socioeconomic and infrastructure development of the relevant territory. In practice, however, the exchange of information provided by the municipalities is limited to data about the population (from the civil registration offices located in the municipalities) and about the situation of local infrastructure.

The municipalities participate through their representatives in the employment councils established under the regional administrations, which are one of the information sources for developing regional employment programs. The main indicators that the regional councils request from the municipalities are related to levels of unemployment and poverty and the possible areas for employing mostly long-term unemployed people.

The regional administrations establish contacts with the MLSP regarding projects related to employment. Although the information provided may contain statistical data, providing a statistical service is not the primary purpose of the MLSP. The drafting and implementation of projects is something new for the regional administrations, and that newness explains to some extent why, according to the employees, this channel is one in which the regional administrations are both producers and providers of information.

The regional administrations do not perceive themselves as data producers. At a time when these institutions are striving to find their place in the public arena, they are seeking to build the image of governing bodies that require, rather than provide, information.

Municipalities

The information flows to the municipal administrations are largely related to preparation of the municipal budgets. Data needed for elaborating local development programs and employment programs are less in demand. The information flows related to the preparation of the municipal budgets are routine and annual, and they comprise data connected to defining the subsidies and some expenditures, for example, staff remuneration and maintenance of municipal units that render social services such as schools and social centers. The ministries and other institutions for the municipalities usually deliver information on paper, but diskettes are also used, primarily in

the MLSP. The main problems are related to delays of needed information; the condition of telecommunications; and the level and quality of hardware and software in a number of municipalities, especially the small ones, further limiting the possibilities of distributing information electronically. Analysts observed no significant differences or peculiarities in the information flows related to current needs and practices among the surveyed municipalities. The only exceptions are relations between the municipalities and the tax offices.

The municipalities often complain that they do not receive data on time. The delays lead to tension in the process of drafting and adopting the municipal budgets, because the deadline established by law is usually one month.

Municipalities receive considerable information from the RSO to help them prepare the budget, and also to perform other tasks, such as elaborating regional development strategies. The information supplied, however, often is not current and often does not meet the needs of the municipalities.

Making the regional administrations sources of information for the municipalities is one possible way to increase their role in regional country management. The municipalities would become successful partners in the regional development councils and participants in the preparation of the regional development plans if the regional administrations enhance their commitment to provide adequate information for the municipalities.

Municipalities request data for periodic analysis of budget performance and for setting the solid waste fee. In the first case the municipalities need data on revenues by type of taxpayers, by structure of the tax entities, and so forth. In the second case they need data for the tax base of real estate. The municipalities have two major complaints regarding the provision of this information by the tax offices: first, municipalities do not receive data on time, and second, data are provided only in hard copy form. The form, a model imported from the software used in the tax offices, creates problems for the municipalities, which must input data manually every month into another obligatory model—again set by the MOF. Thus the products used by both institutions are not compatible, particularly for obligatory activities done by and for the MOF.

The information flows from the local LOs to the municipal administrations also serve the budgeting process. A number of problems occur, namely:

- The LOs use a slow and traditional means for the exchange of information (paper, on demand by the user).
- The LOs and the municipalities have no direct information link.
- The data on the local labor market are not presented on the Internet, and the LOs still do not have their own Web sites, so municipal officials must search for personal contacts with LO employees. This necessity appears to be a contributing factor to the delay of information exchange.

On the positive side, analysts observed no significant differences or peculiarities in the information flows between the LOs and the municipal administrations in relation to current needs and practices.

The municipal budgets contain in-kind indicators for every activity. The most important ones are number of staff, number of students, number of classes, number of children in kindergartens, number of settlements, and population size.

The municipalities not only collect, process, and provide information from the municipal budgets, they also produce it. At the same time, the municipalities provide data (such as population size and social and economic characteristics of the municipalities) obtained from other sources, thus the municipalities are intermediaries in the provision of certain information.

The municipalities, for their part, are not inclined toward any changes in the status quo. They claim that the regional administrations should perform their information functions and provide

them with information related to their development. The problems, in this particular respect, are organizational and political ones and, to a lesser extent, are related to the provision of information. The municipalities encounter a number of problems. First, and central, are the linked problems of financial limitations and lack of equipment. Such problems may prevent many municipalities from becoming active local counterparts to the central institutions even though a significant number of central institutions would like to receive more data from municipalities. Second, within the central institutions the data provided by the municipalities are considered to be only minimally reliable. Third, the low-quality software used by the municipalities hinders effective performance. Fourth, local administrations lack information about applying for projects.

Regional Tax Offices

The RTOs collect and provide data related to the revenues of the central and the local budgets. These data are used to determine the plan for the tax revenues and report the tax and nontax revenues by municipalities.

The information collected, processed, and provided by the RTOs is also generated by them. The RTOs collect and provide the MOF with business development data for the purposes of planning, and particularly for disaggregating the national plan for tax revenues. In other words, the RTOs serve as mediators between the RSO and the MOF. The tax offices in both monitored regions pointed out that the specific data are only partially accessible to the public.

The RTO plan differs from that of the municipalities, particularly concerning the nontax revenues and the waste fee. The RTO executes its own plan without considering the plans approved by the municipalities.

The RTOs have two problems related to their capacity: they need more staff and they need better software. Current software is not compatible with the software at the institutions with which they exchange information.

Most of the RTO data are provided on hard copy, which impedes their processing and use.

Labor Offices

The LOs' information flow is intensive, comparatively well regulated, and routine. The data are accessible and provided even over the telephone.

Some data users (the municipal administrations in the small municipalities, for example) still do not have e-mail, thus the exchange of information through this quick and reliable means of communication is impossible. Instead, the data are provided on hard copies and then manually entered into computers, a procedure that involves much time and effort and increases the probability of introducing errors. Moreover, in some large towns the bigger clients (RSOs, for example) have only one e-mail address (for the director). This limitation is an obvious impediment to free and quick data exchange at all working levels.

The municipal administrations and the central institutions sometimes request data on the entire region from the LO in the regional center. (Regional centers cover a maximum of three or four municipalities.) This request requires special effort to collect data from the other LOs in the region and to systematize and process the data. These efforts do not correspond with the functions and tasks of the LO in the regional center.

The district administrations sometimes require information about the labor market from both the LOs and the RSOs, leading to duplication of the information flows.

The problems confronting the LOs and other data providers frequently result from external factors and limitations, for example, the quality of telecommunications in small municipalities and settlements, the technical equipment of the client, and the lack of e-mail and Internet access.

The technical office equipment of the LOs is insufficient given the large amount of information they collect and process. The data are provided primarily on hard copies and are partially accessible to the general public. Because the information is provided free of charge, some users (the regional administrations) occasionally obtain the same information from different sources, for example, from the LOs and the RSOs. The local LOs do not have their own Web sites, so users do not have free access to the needed "standard" data. The statistical information available on the employment agency Web site about the status of employment and unemployment by municipalities is not current and does not meet the practical needs of the municipalities and other users.

Conclusions and Recommendations

This study examined

- The level of decentralization and its characteristics in Bulgaria, including the allocation of public services and financial resources at the level of public institutions, their competencies and responsibilities, and the nature of intergovernmental transfers
- The information flows used and needed by central, regional, and local institutions to develop sound public policy and to deliver efficient, competent public services.

This section summarizes the major themes and issues that emerged from this study and offers some initial thoughts on what needs to be done to improve the coverage, timeliness, accuracy, and accessibility of subnational data.

Human Resources

The human resources involved in the production of statistical information in most of the national and subnational institutions are insufficient in terms of both number and qualifications. This fact is particularly pertinent to the municipal administrations and the LOs in small and medium municipalities, as well as to the NSAS and its local branches (MSASs). As indicated earlier, the RSOs also have difficulties in this respect. Objectivity demands that we also mention that a number of external and internal factors (such as inadequate technical equipment, low-quality telecommunications services, budget restrictions, and so forth) limit the access of many local institutions to modern means of data collection, processing, and provision. The latter fact lowers the requirements for the professional qualifications of the staff, which, in turn, becomes a barrier for the optimum flow of information.

A simple solution to the human resources problem is not available. The solution depends on alleviating other restrictions in terms of resources and organization. Institutional strategies for human resource management must be elaborated. Within the framework of such strategies, the emphasis should be put on enhancing the qualifications of the staff dealing with the generation and management of the information flows. Enhancing staff qualifications can and should be regarded as part of institutional programs for providing information.

Financial Resources

The limited availability of the financial resources needed to produce and obtain the necessary statistical information has been a huge constraint in the subnational statistical system. Most of the surveyed institutions supported by the budget do not have the necessary financial resources to develop information systems. The insufficient development and incompatibility of these systems do not allow users and producers to form a unified network for information exchange. Even

the NSI system does not seem to be fully equipped in this respect. The local RSOs do not have enough resources to upgrade and maintain their existing technical equipment. Bad telephone lines and lack of funds to pay for telephone services constitute another common restriction. In other institutions (the NSAS and the MSASs, for example), building information systems depends on the successful implementation of projects by foreign consultants. Internet access in most of the central institutions is a positive development.

The solution might be sought in part through external financial assistance for building information systems and training staff. Using the experience with building information systems accumulated at the local level, for instance, in the town of Blagoevgrad, could be helpful.

Technical Environment

The lack of adequate technical equipment—hardware, software, copying machines—as well as the poor quality of telecommunications (such as slow and unstable Internet connections) are important impediments to the modernization of the subnational statistical system. These problems are typical for all the institutions studied. The situation is especially difficult in the municipal administrations, in particular in smaller and medium municipalities, and in the MSASs. In some cases, the various software products used by different institutions are incompatible, for example, the RTOs.

The solution to this problem can be sought by providing the necessary financial resources, which should be spent on special institutional programs to provide information.

Several problems relate to the means of data transfer. The solution to these problems boils down to the transition from an exchange of information on hard copies to Internet-based exchange or, at a minimum, exchange of information on diskettes. Upgrading the technical equipment and training staff in its use will lead to quicker and more reliable information exchange.

Paper is the most widely used information carrier for distributing information to the municipalities. For example, when replying to a written request by a municipality, a ministry prepares the information and sends it to the municipality by mail, which obviously adds time to the process. In some cases diskettes are used also. The problem is that the small municipalities do not have good telecommunications at their disposal, and the distribution of data via e-mail is an exception rather than normal practice.

Methodological Problems

The main shortcoming of regional statistics is the lack of data on economic activities. The problem of data provision at the municipal level is related to how to allocate the product and financial results of one company among its territorial branches, which are not autonomous legal entities according to their location. Identifying the so-called local entities and including them in the economic register to render an account of their activity by location together make up a methodological problem. A serious problem related to the use and distribution of regional data is ensuring confidentiality at the municipal and district levels.

Organizational and Management Issues

The main institution responsible for data collection, processing, and provision is the NSI and its regional structures, the RSOs.

National statistics are structured according to a national plan that covers the appropriate indicators. The official information is produced slowly, because it requires much verification, additional processing, and strict observance of validated methods. Because of financial problems, the

NSI and the RSOs cannot enlarge the scope of the information collected, even though that information does not meet municipal needs in terms of quantity, quality, and timing.

The frequent changes in the legislative framework call for respective changes in information flows. In turn, the lack of technical equipment and sufficiently trained staff lead to delays in providing the needed information. Stabilization of the legislative framework and better technical equipment at the institutions would lead to normalization of the processes related to the organization and content of information flows.

Ensuring compatibility among the information systems of different institutions would also permit free data exchange among them.

The municipalities frequently complain about delays in the provision of the necessary instructions and data, and these delays make the process of drafting and approving the municipal budgets within the legal deadline (usually one month) very tense. The MLSP makes similar claims in regard to municipal data. A particular weakness of the information flow from the municipalities to the MLSP is the delay in the provision of required data. Many municipal reports are presented only on hard copy. Both the delays and the format are due to the inadequate hardware and software used by the MSAS.

In addition, the MOF duplicates the information flows in the reports for the municipal revenues (tax and nontax) with information from the tax offices. Analysts also observed that the quality of the data received by the municipalities is not good. Furthermore, the municipalities are often late in submitting data.

Reliability

The quality of the information received and its reliability are additional problems identified by the survey. The strongest complaints expressed by the central institutions were in regard to the data provided by the municipalities. The users' mistrust of the data made them check and double check the reasons for differences or incongruities in the data and then to look for other sources of information. Thus information flows are duplicated and delayed. The solution to this problem depends to a large extent on the regional administrations' capacity to produce information.

The MES has to duplicate the municipal and the NSI data, because it considers the data provided by the municipalities unreliable. This extra step increases the expense, reduces the effectiveness of the process of data collection and processing, and has a negative impact on the quality of the documents for which the information is used.

Public Access to Data

The access of external users to public information deserves mention. Its solution at the institutional level seems to be relatively easy; the only thing needed is good will on the part of the respective institutions to open themselves to external users in compliance with the Public Information Accessibility Act.

The successful search for external financial assistance for modernizing national institutions in relation to information implies that this modernization should be defined as a national priority.

Autonomy of the Municipalities

The main problem of the municipalities is the lack of power. Without power, municipalities are unable to enact effective local policy, and thus have a relatively limited need for statistical information.

Municipalities have sporadic statistical data needs that arise for specific reasons, and each municipality's needs are unique. No contractual agreements define the relationship between the

municipalities as the users and the institutions that collect and provide data. The municipalities do not maintain their own databases and frequently require different interpretation of the data to apply it to specific needs. To ease this problem, a decentralization program, which has been developed and is currently being intensively negotiated by the central and local authorities (the latter being represented by the NAMRB), will be adopted.

The municipalities provide much information in the form of reports covering more than 1,800 indicators to different central institutions. Meanwhile they do not have access to and do not receive the processed and generalized data for all municipalities from the central institutions. The NAMRB, as the municipalities' representative, is compelled to collect and process the municipal budget data in parallel with the MOF. Solving the problems of the analogous collection of the same data and of access will require the following actions:

- Complete information from the municipal quarterly reports should be presented to the NSI and the NAMRB. The MOF should provide the algorithm for calculating the subsidies and the additional subsidies.
- The RTOs should provide the municipalities with data on tax revenues by types of taxes and taxpayers.
- The NAMRB capacity building should be financially supported to improve the information links with the municipalities and, in turn, enlarge the database and circulate the information among its members.

The discrepancy between what the RSO staff point to as problems of regional statistics and the problems indicated by local data users is huge. The comparison of the different views leads to the conclusion that local data users still have a low demand for information and limited criteria for the ways information is provided or organized.

Data Gap

The survey identified a series of data gaps, when institutions needed more data than they had to improve their operations. Municipalities and tax offices considered information from the MOF insufficient. They both need data on the overall state budget and on the main macroeconomic indicators, such as GDP, inflation, and average gross wage growth. The municipalities need data to estimate a forecast budget, to estimate the general subsidy, to create the three-year forecast for the intergovernmental grants and shared revenues, and to define the objectives and criteria used for allocation of the additional subsidies.

The RTOs would like to receive timely information about expected changes in the tax legislation, as well as plans and strategies for development of the respective regions. They need current data on municipal decisions about the waste fee, vacancies, changes in ownership, and plans for local development.

The major requirements of the municipalities regarding the RTOs are related to the need to receive more detailed information about taxpayers (especially the big ones), the tax base, private companies, and so forth. This need is directly related to the opportunity for justifying local decisions.

The survey identified the willingness of the regional and municipal administrations to receive projections about the unemployment rate and labor force migration from the LOs. The preferred way for obtaining the data is officially regulated, on a hard copy or a diskette, and at least once a year or when needed. The regional employment offices should be the primary institutions meeting this expectation, because in part, their functions and tasks cover analytical work. The possible solution is generalization of information about the labor market within the

region by the RSO in close cooperation with the regional employment office in the respective regional center.

Outcomes from the Workshop Discussing the Report

The NAMRB organized a workshop held in Sofia on May 20, 2002. The NAMRB's interest in the topic and the problems predefined its active position for their resolution. About 40 representatives of the central, regional, and local authorities and the NSI and its regional structures (the RSOs) attended the workshop.

The participants agreed with the survey results. The discussion was constructive, because everyone was searching for ways to solve the problems. A working group was designated, and it summarized the following six main problems and the participants' proposals, which were presented at the end of the workshop.

PROBLEM: The main problem of the municipalities is their lack of power. Without power, municipalities are unable to enact effective local policy, and thus have a relatively limited need for statistical information.
PROPOSED SOLUTIONS:

- The scope of changes in the municipal authorities' responsibilities should be clarified and local authorities' needs for additional data to carry out effective and efficient local policy should be assessed.
- A subsidiary survey of municipal needs for socioeconomic information should be conducted, and a unified system of regional and local indicators to be included in the NSI national plan should be proposed.

PROBLEM: The main institution responsible for data collection, processing, and provision is the NSI and its regional structures, the RSOs.
PROPOSED SOLUTIONS:

- The NSI and the RSOs should harmonize their schedules with the needs of the municipalities and the district administrations.
- The NAMRB and the NSI should specify the schedule and terms for provision of regional and local information to comply with local policy needs. The RSOs should provide operations data.
- The NSI should obtain financial support for carrying out subsidiary surveys and for providing the municipalities with the proposed data.

PROBLEM: The municipalities provide much information in the form of reports covering more that 1,800 indicators to different central institutions.
PROPOSED SOLUTIONS:

- Complete information from the municipal quarterly reports should be presented to the NSI and the NAMRB. The MOF provides the algorithm for calculating the subsidies and the methods for calculating the additional subsidies.
- The RTOs should provide the municipalities with data on tax revenues by types of taxes and taxpayers.
- The NAMRB capacity building should be financially supported to achieve improved information links with the municipalities in order to enlarge the database and circulate the information.

PROBLEM: Technology use is inadequate.
PROPOSED SOLUTIONS:

- Changes to the Uniform Budget Classification should not be allowed.
- The MOF information center should be given the assistance it needs to develop modern software for current and annual reporting.
- The software used by the institutions should be made uniform.
- A list of the poorest municipalities that lack equipment should be drawn up, and these municipalities should be targeted for financial support.
- A gradual move toward municipal reporting via e-mail should be initiated.

PROBLEM: Municipal officials lack training.
PROPOSED SOLUTIONS:

- Municipal officials must be taught skills for working with the standard computer software used for data reporting.
- Seminars should be offered to develop the skills of the municipal financial experts so that they are able to collect, process, analyze, and assess data needed for producing and implementing local policies. Training should include using appropriate methods and analytical techniques to that end.
- A municipal database should be created, maintained, and used.

PROBLEM: A work schedule is lacking.
PROPOSED SOLUTIONS:

- If possible, the World Bank should assign Club "Economika 2000" and the NAMRB to jointly analyze the needs for additional information accorded to the projected changes for the coming year and to develop an indicator list, uniform for all municipalities. The results of this activity would be presented before the work on the action plan starts.
- The action plan should specify the topic of the necessary seminars based on the decentralization policy objectives. The seminars were delivered during October 2002 through March 2003.
- Representatives of many institutions, especially central-level ones, should be involved in the drafting of an action plan.

4

Romania

Gabriela Matei, Pena Antonevici, Afrodita Popa, and Victor Giosan

This chapter summarizes the needs assessment report of the subnational statistical capacity building project. It assesses the current situation of subnational data collection in Romania, the degree of availability of the existing data that is reported at various levels of government, and evaluates local governments needs for data in the policy making process.

The Current Status of Fiscal Decentralization in Romania

Since the decentralization process started in Romania in 1990, local governments have become increasingly responsible for addressing the needs of local communities and for being more accountable to citizens. The reform of the local public finance system was accelerated in 1998 by the passage of a law on local public finances (law no. 189/1998) that changed intergovernmental fiscal relations and the structure of local governments' finances. Basically the reform was threefold as follows:

- Local authorities were given more control over their own revenues. Local councils were authorized to administer their own taxes and fees and to be responsible for the assessment, collection, tracking, and monitoring of local taxes and fees through their own offices.
- Revenue sharing was introduced. County councils and local councils receive shares from the income tax collected from taxpayers in their jurisdiction. The income tax is incorporated into the national budget, and the shares are automatically transferred to local budgets.
- Equalization grants were introduced to correct the vertical disparities among the counties and the horizontal imbalances within each county and among communities.

Changes in the regulatory framework have increased the importance of sound financial decisions at the local level.

Subnational Structure

Local public administration structure is defined by the Constitution and by the Local Public Administration Law (law no. 215/2001). The subnational units are organized in two levels:

- The county level, with 41 *judete*
- The local level, with 2,951 local government units (LGUs).

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Based on number of inhabitants and size, LGUs are classified as municipalities (*municipii*), cities (*orase*), or communes (*comune*). As shown in table 4.1, within the 2,951 units, 83 are municipalities (3 percent of the total), 179 are cities (6 percent of the total), and 2,688 are communes (91 percent of the total). LGUs with an average size of 2,000 to 10,000 inhabitants are predominant in Romania, representing 77 percent of the total number of LGUs. Nearly 43 percent of the total population lives in LGUs with populations of less than 10,000. All LGUs have identical competencies and attributions. Bucharest is the only municipality with six subordinated sectors, each having a local council and a mayor.

Both county and local levels have the same status concerning their autonomy, and the two levels have no formal subordination relationship. The 41 counties cover all the national territory of Romania. The territories of municipalities, cities, and communes fall within the boundaries of the county. Each county has a capital city (*municipiu-resedinta de judet*), where the most important administrative institutions are located.

County councils perform both legislative and executive functions. The county council, whose members are elected for a four-year term by direct and universal vote within the administrative territory, performs the legislative function. County councils establish the committees of specialists responsible for drafting decisions in their fields of competence. The president, who is elected by the members of the county council and is accountable to the local councils for the efficient operation of the local government, carries out the executive function.

Local councils, whose members are elected for a four-year term by direct and universal vote within the administrative territory, perform legislative functions. Local councils establish committees of specialists responsible for drafting decisions in their fields of competence. The executive function of local public government is carried out both by the mayor and vice mayor. Mayors are directly elected once every four years, are the principal official executives of the local public government, and are accountable to the local councils for the efficient operation of local government.

The differences between the responsibilities defined for county councils and those for local councils are few. Local and county councils have decisionmaking power, and the mayor and county council president represent the chief executive authority. The number of inhabitants in the administrative unit territory determines the number of council members.

Based on the provisions of the Law on Regional Development (law no. 151/1998) and on their free consent, the 41 counties and the Bucharest municipality are grouped into 8 development regions, created to provide the framework for implementing and evaluating regional development policy. The regions are not considered to be a distinct level of public administration. Each region has a regional development council, which acts as a deliberative body with the role of coordinating the activities and promoting the objectives of regional development policies. The eight regional development agencies operate as nonprofit legal entities.

Table 4.1 *Structure and Population of Local Governments, 2001*

Category	*Number*	*Percentage of total*	*Population*	*Percentage of total*	*Average population*
County councils	41	100	22,533,156	100	549,589
Local councils	2,951	100	22,533,156	100	7,636
Bucharest	1	1	2,027,512	9	2,027,512
Municipalities	83	3	8,032,804	36	96,781
Cities	179	6	2,320,375	10	12,963
Communes	2,688	91	10,152,465	45	3,777

Source: National Institute of Statistics.

As deconcentrated units of the government, the county prefects provide the connection between the Ministry of Public Administration (MPA) and local governments. In every county the prefect and deputy prefect are appointed by government decision. The prefect, as a representative of the central government at a local level, is responsible for coordinating the decentralized bodies of central institutions in the territory. As a government representative, the prefect reviews the activities of local councils, mayors, county councils, and their presidents to ensure that their duties are carried out according to legal provisions. From the legal point of view, there is no subordination between the county public authorities and the local authorities or between the prefecture, on the one hand, and the local or county councils and the mayor, on the other hand.

Expenditure and Revenue Assignment

As part of the decentralization process that started in Romania in 1990 and accelerated in 1998, local governments have taken on new service delivery and revenue-raising responsibilities.

Local and county councils have the following expenditure responsibilities:

- *Public authorities.* The expenditures under this budget heading are available to the LGU (county, city, or commune) with a number of limitations:
  - The salaries of local public servants are set by law, within certain ranges.
  - The maximum number of staff is set by law, depending on the type of LGU (county, city, or commune) and the number of inhabitants.
  - The local authorities are limited in relation to certain types of expenditures based on guidelines set by law (law no. 80/2001) (protocol, fuel, vehicle, and telephone costs). Local governments have discretion on the rest of the expenditures for the operations.
- *Education.* Expenditures for funding primary and secondary education are provided from the local budgets of each local government's jurisdiction. These activities are funded in part from the state budget and in part from own sources of the local budget, with the following decisionmaking limitations at the local level:
  - The standards (school curricula, textbooks, and so forth) are established at the central level.
  - The number of staff in education is established at the central level.
  - The salaries of education staff are set at the central level.
- *Health.* Clinic activities are funded in part from state budget transfers and in part from own sources of local budgets. Expenditures for funding these activities are fully controlled by LGUs.
- *Culture.* Decentralized cultural institutions are funded from local budgets. Salaries for staff in cultural institutions are regulated at the central level. The number of staff and material expenses for cultural institutions are set at the local or county level, according to the subordination of the institutions.
- *Religion.* Starting in 2002, salaries for nonclergy are assured from local budgets. Some religious institutions became subordinated to local governments, which are also in charge of their funding.
- *Public services.* Public services include the following three responsibilities:
  - General interest public services (maintenance and repairs of streets, street lighting, sanitation, maintenance of parks, entertainment, sports grounds, water supply, sewerage, district heating and power plants, waste collection and disposal, and so forth) are fully regulated at the local level.
  - National and county roads, including road maintenance and building, are funded from special funds transferred to local budgets. Local governments may cofund these activities, but are not obliged to do so.

  - Roads and water supply in rural areas are funded from special funds, based on approved projects.
- *Local transport.* Quantity and quality standards for the provision of local transport services are fully controlled by the local governments. Until 2002, these services were partly funded from state subsidies. Starting in 2002, the service is fully funded from local budgets.
- *Public community services for emergency situations.* As of 2002, these services are the responsibility of the LGUs and funded from their budgets.
- *Social welfare.* Social welfare includes the following four responsibilities:
  - Services and care for the disabled are centrally regulated in terms of staff salaries and material expenditures and are funded partly from the state budget, partly from local budgets.
  - Child protection services are centrally regulated (both regarding staff salaries and material expenditures involved) and partly funded from a portion of the value added tax and partly from county councils. Legal provisions stipulate that local governments (county councils in this case) shall ensure funds for these activities as a priority.
  - Assurance of the minimum guaranteed income is set by law at the central level. The LGUs have a small range in setting poverty criteria and the number of beneficiaries for this social allowance.
  - Subsidy of heating prices, including residential district heating, is subsidized from shared amounts of the income tax allocated to the county councils, which distribute the amounts to local councils in proportion to the quantity of heating provided to the population. Possible savings from shared amounts for district heating are used to increase heating allowances or for technological upgrades. The reference price for heating is established at the central level, and the difference between the reference and production costs is subsidized from local budgets. Vouchers for heating have an upper limit. The ceiling for eligibility to receive these vouchers is established at the central level. LGUs fund these subsidies from local budgets.
- *Housing.* Housing is controlled by LGUs. Partial funding comes from the central level through special funds, although the allocation criteria for these funds are not sufficiently transparent.
- *Economic development.* Amounts to be spent are fully determined by local authorities.

On the revenue side of the budget, governments rely on a wide variety of tax instruments available for their revenue needs, such as direct, indirect, general, specific, business, and individual taxes. Revenues of the subnational governments are primarily composed of own revenues, shared taxes, transfers, and loans:

- *Own revenues.* Local property taxes (on buildings and land, from physical and legal entities, and on income derived from leases and rents), taxes and fees for goods and services (owned vehicles, various fees for permits), and other taxes and fees make up own revenues. The Law on Local Taxes and Fees (law no. 27/1994) defines local taxes and fees and regulates the tax base and the tax rates under the authority of the local government. Numerous amendments between 1998 and 2002 affected both the categories of taxes and fees and the taxation base. Local governments have the ability (a) to index the taxation base and, therefore, avoid depreciation caused by a high inflation rate, and (b) to increase or decrease the levels provided by law by 50 percent. (A new ordinance, law no. 36/2002, will eliminate the ability to decrease the levels, thus limiting local autonomy. This ordinance is now under discussion in Parliament.) Local governments can also introduce special fees for specific services, but in practical terms, this system is limited by economic problems that are affecting the living standards.

Starting in 1999, subnational governments have had the responsibility to establish, assess, monitor, and collect own revenues and create their own local arrangements for carrying out these new functions. Having their own services gives local authorities the opportunity to have accurate information at the collection level. Local governments have the incentive to find appropriate means to increase collection and discourage nonpayers, thereby decreasing arrears.

- *Shared taxes.* In 1998 the Local Public Finance Law established shared taxes for each type of local public government. In 1999, of the pool of funds made available from shared taxes, 50 percent was allocated to the state budget, 40 percent to local budgets, and 10 percent to the county council. When the global income tax was introduced in 1999, the Emergency Ordinance (law no. 216/1999) changed the shares to different percentages, giving 35 percent to local budgets, and set up the budget equalization fund available to the county council, with a share of 15 percent of the income tax. These values were in place for fiscal years 2000 and 2001. Each year, the state budget law modifies the percentages, and although the variation is not very significant, this action demonstrates the lack of predictability in the decisions affecting LGUs, decisions that have a direct impact on their budgeting processes. In 2002 the percentages were as follows: 36.5 percent of the personal income tax (PIT) for the local budgets of communes, towns, and municipalities; 10 percent for the own county council budget use; and 16 percent for the county councils to be allocated as equalization grants targeted to communes, towns, and cities, and in exceptional cases, the county.
- *Transfers.* Three types of transfers are common. First are equalization grants, a major type of transfer, defined in the annual state budget law and consisting of three separate parts:
  - A sum is allocated to each county and the amounts are specified in a special annex of the annual budget and divided into two categories: one portion for the own budget of the county council and the rest to be given to the LGUs within that county.
  - A specific sum is allocated to each county to pay part of the costs of the heating subsidy.
  - Another special annex to the annual budget presents the formula to be used by the county councils to allocate equalization grants to the local councils. The formula measures the relative fiscal capacity of county and local councils.

  County councils are obliged (by law no. 189/1998) to use the formula for allocation within the county, but there are no penalties for not doing so. The Ministry of Public Finance (MPF) is trying to give counties the necessary support to improve the allocation method and reduce the horizontal disparities within each county. The MPF's Budget Department provides, in electronic format, the detailed data for communities, but because the formula cannot satisfy special situations, most county councils do not use the formula and have shown discretion in the allocation. The unpredictable and nontransparent allocation method of the county councils is known and tacitly accepted based on political subordination (most county council presidents are members of the ruling party). Having discretion gives county councils more power (including political power), and the intervention in the allocation process increases their authority over the other levels of LGUs. In addition, this position was preserved because of the lack of transparency of the budget approval process and the LGUs' lack of access to financial information. Local councils within the county do not have the ability to predict their revenues from equalization grants and do not have the data to compare the amounts they receive with other communities in the county or with similar LGUs from different counties.

  A second type of transfer was the earmarked subsidy. Earmarked subsidies existed until 1998 for heating services and public transportation allowances. Starting in 1999, shares from the PIT have been introduced as targeted grants to subsidize part of the heating costs. The price per gigacalorie is established by government decision, and the subsidy covers part of the difference between the heating utility's costs and the price paid by consumers.

In 2002, 45 percent of the heating allowance was subsidized from the state budget with earmarked shared amounts from the PIT, and 55 percent came from local budgets. The subsidy for the heating allowance is equal for all social categories and does not take into account the level of personal income. The problem with the current system of heating subsidies is that it does not differentiate between those who do and those who do not need assistance in paying their heating bill. All the population benefits from the general price subsidy under the current system.

Third are transfers from the state budget to local budgets to protect the rights of children and of handicapped adults, through the budgets of the National Authority for the Protection of Children's Rights and Adoptions and the Ministry of Health and Family. Starting in 2002, funds were granted from the state budget as amounts deducted from the value added tax revenues, allotted and approved for each county and for the municipality of Bucharest, as an annex of the state budget law.

- *Loans.* Earmarked subsidies for investments from the state budget to local budgets, partly financed by foreign loans, are approved yearly by the state budget law and are distributed to the local authorities for financing investment projects based on foreign loans, according to the loan agreements concluded with international financial institutions.

  Subsidies for financing, elaborating, and updating the general urban planning and local urban planning regulations for financing house building, for funding road paving and water supply in villages, and for financing the reduction of seismic risk in housing units are regulated by special laws and are registered yearly in the budget of the Ministry of Public Works, Transportation, and Housing (MPWTH), based on motivations submitted by the local authorities. After the enforcement of the annual law of the state budget, the MPWTH makes the allocation by counties, and the county councils and the General Council of the Municipality of Bucharest distribute the amounts to the local authorities in the county without any clear distribution criteria.

  Subsidies for financing commune and county roads come from the special public roads fund, representing 35 percent of the total amounts received from excise taxes on oil. The MPWTH allocates the amounts for each county in collaboration with the presidents of the county councils. The special funds are not allocated to local governments based on clear criteria, leaving room for political discretion. Usually the relevant ministries are responsible for administering the funds, and this nontransparent system thus reemphasizes the lack of predictability of resources.

  With the enactment of the Local Public Finance Law (law no. 189/1998), local public authorities are able to take loans directly with no government guarantees, but given the weak state of the banking system, the high rate of inflation, and the general economic situation in Romania, the borrowing option has not been widely available to local governments. Long-term loan financing is at present available only to the most financially viable municipalities and public enterprises and is almost entirely focused on the water and wastewater sector. The most frequent financing methods for major investments were through the European Union's (EU's) Poland and Hungary Assistance for Economic Restructuring (PHARE) program and the European Bank for Reconstruction and Development, European Investment Bank, and World Bank loans, all guaranteed by the government and undertaken by major municipalities and county councils.

Although the legal framework for local government borrowing exists, the interpretation of the provisions by the MPF suggests little willingness to allow local governments to borrow autonomously, even within the limits and rules established by law.

Overview of the Decentralization Process

The legal and regulatory environment is in a continuous state of flux. A large number of laws, government ordinances, and government decisions has been passed each year. More than 30 regulations affecting the level of revenues and expenditures were issued each year between 1998 and 2002, but most of these had provisions for changes affecting local budgets after the budget process was initiated. Some, enacted during the budget year, took most local authorities by surprise. The limited consultations with local public authorities during the process of drafting the legislation contribute to the lack of predictability. For the amendments of the legal framework affecting local governments, starting in 2001, both the MPF and MPA established an efficient consultation and cooperation method with local authorities.

The local budget process is a major obstacle to any attempt by the local and county councils to manage their finances on a sound basis consistent with local needs and priorities. No hard budget constraint forces local decisionmakers to make difficult spending priority decisions within a given level of revenues. To a large extent, the problems with the local budget process derive from the absence of a transparent and predictable process for allocating the equalization grants. Currently, estimating what level of equalization grants to expect in the coming year before preparing the draft budget is impossible. The transparency and predictability of the transfers from the state budget are limited, because the total amount that will be distributed from the state budget is not known from one year to the next, whereas both the values of the shared taxes and the equalization grants formula are published in the annual budget and, until now, have been changed each year.

Most of the issues, however, are triggered not only by the emergence of changes taking place during the budget year, but also by the financial analyses and rationales for these changes. Generally, plans to decentralize public services must be announced in advance, with a clear definition of roles and responsibilities for each level of public authorities and sound financial analysis to assess the impact on local budgets and the capacity of local governments to take on the responsibilities. Under the current conditions, the lack of predictability and transparency of the process gives rise to local governments' lack of interest in developing medium- and long-term policies.

Large financial discrepancies exist between counties. The difference in total revenues per capita between the richest county and the poorest county is more than 2:1. A review of the percentage of total amounts of the global income tax that are returned to the county of origin (as equalization grants) shows that 12 counties out of 41 and Bucharest receive less than the national average. This finding means that only 12 counties are "rich" and fund the others. Fifteen counties receive a percentage between the national average and 100 percent, and could be referred to as self-sufficient counties. Fourteen counties receive more than 100 percent of their collected global income tax and are poor counties. No minimum or average standards exist for the costs of the various responsibilities. Funding of the responsibilities is not based on an evaluation of needs.

The situation in the counties is much more disparate: in some rich counties, the difference between the revenue per capita of the richest community and the poorest community is more than 5:1. The difference is greater between rural and urban areas: generally the municipalities that are country capitals (and usually represent 30 percent of the county population) capture more than 80 percent of all local taxes and fees collected in the county.

One of the most important issues subnational governments in Romania are facing is related to the lack of clarity in the law for assigning responsibilities for service delivery and expenditures among various levels of government. In recent years new responsibilities have been transferred to local public administrations, most of the time without adequate financial resources and during the budgetary year, thereby increasing uncertainty and instability and making budgetary planning at the local level impossible even for the short term.

No minimum or average standards exist to evaluate the costs of the various responsibilities. Various public services are dependent on the pertinent ministry and its local offices. No set of standards is elaborated for each type of service. As a consequence, evaluating the implied vertical imbalance and estimating the transfers to counterbalance it is difficult. By calculating the costs per capita to cover the minimum standards imposed, the total costs can be determined. LGUs are able to determine how much they can afford to cover and the pool of transfers needed for the expenditures.

A detailed assessment of the groups benefiting from subsidies will be needed soon. Local governments have been given authority over the district heating; however, state-owned enterprises and certain groups of people have large arrears in paying their heating bills. Thus the local authorities will need to know how focused the subsidies are and how to target them more efficiently.

Current State of Subnational Statistics

This section provides the basis for identifying the statistical and financial data Romanian central and local governments need to design effective public policies and creating an accessible system for central and local institutions. To understand how the system currently functions and its shortfalls, the approach involved

- An inquiry within the most important institutions at the national level—ministries, the National Institute of Statistics (NIS), nongovernmental organizations, and so on—to understand how the structures are designed to function and the perspective from top to bottom
- An inquiry at the local level with the offices of the key ministries involved, service agencies, divisions, and inspectorates, to understand the relationships with local authorities.

Local Governments

In the past few years, as a consequence of the decentralization process, local authorities' responsibilities for providing services have increased. Local authorities became increasingly aware of the important role of information as a basis for their short- and medium-term decisions. As local governments need to become more accountable to their constituents, they need to rethink the way they use available sources of information to provide services effectively.

Today, local authorities use statistical data from the following local institutions:

- County divisions of the NIS
- Local registries of trade and commerce
- Local deconcentrated units of the ministries relevant to the services that local authorities are providing
  - County education inspectorates
  - County divisions for labor and social solidarity
  - Financial administrations
- Center for regional development (in one instance only).

By law no. 215/2001, local governments have created special divisions within their executive departments to collect, monitor, and evaluate information covering fields such as buildings and urban planning issues, financial management (revenues and expenditures), social programs, public works, agricultural and environmental issues, and road services. Usually data are used for budgeting purposes, for a better evaluation of revenue and of expenditure needs, and as basis for the elaboration of some basic local policies.

Most local governments have no special structures for collecting, processing, and providing the information needed for local public decisionmaking and for drawing up short- and medium-term strategies. Only in few cases, when special departments were created to collect public information on general issues, the environment, and urban planning, has the local government had the capacity to analyze the data collected. Most admit to not having the capacity to evaluate the data and to not collaborating with institutions that have the analytical capacity or that have research institutes.

The most important difficulties encountered in using national indicators for local economic and social development (average price increase index, differentiated economic growth, level of foreign investments, revenue per capita, unemployment rate, illiteracy level, poverty level, and so forth) arise because national indicators aggregate and weight data to derive averages and do not reflect differences encountered at the local level. Some mayors pointed out that decisionmakers must also take financial indicators, such as own revenues per capita, into account when assessing the poverty level by county.

Access to financial, statistical, and social information is deemed an important issue by county councils, municipalities, and cities, but is less important for communes because of their small size and their ability to obtain information directly from citizens.

The most difficult problems are related to social protection, because county and local councils are responsible for expenditures that are based on information from various sources. That information is not easy to access, and figures may differ among sources.

One of the problems relates to the different rules applied by each institution requesting data. When information is analyzed, the assumptions underlying the analysis may differ, and thus the results may be misleading, even if the data are reported correctly.

The accounting system is another reason for problems regarding financial information. Rules established by the MPF are respected and consistent, and data are reported faithfully, but limitations are caused by the public accounting system. A single, unique classification is used for all public financial data that applies both to national and local governments.

Thus despite its positive features, the current system does not meet all current financial accounting and reporting needs of local governments:

- The system works on a strictly cash basis of accounting. As such it does not produce vital information about outstanding liabilities. No record is kept of amounts owed but not paid.
- Each public institution is treated as an independent reporting entity, even when various institutions, such as some public utility companies, are under the authority of the same public institution (city hall). As a result, no report that provides the comprehensive financial data needed to fully reflect financial accountability is readily available.
- No general purpose external financial reports are issued, and the concept of such reports does not exist. All the financial reports that exist are prepared for internal users, government managers, and elected officials.

LGUs' financial reports are collected in electronic format by the local treasury offices and sent to the MPF for analysis and aggregation. No financial database is publicly available. The MPF may allow access to information for analytical purposes on a case-by-case basis.

Local governments have access to various sources of information regarding revenues and expenditures, but the information is fragmented and scattered among a large number of public institutions. Furthermore, information is not public: some institutions are open to allowing access to their database; others may not be. As consequence, local governments do not obtain all the information needed to make decisions. Good managers and decisionmakers can overcome the flaws and find ad hoc solutions, but no coherent information system is publicly accessible on a permanent basis.

To realize the advantages of the existing system, creating a single computerized database with the information for each fiscal year would be necessary. As the classification creates a unique, numeric code for each of the different types of revenues and expenditures, such a database would make analyzing public financial data in Romania almost effortless.

County information systems should be reorganized to allow the use of public finance tools and budget and resource allocation forecasts and at the same time to provide a more transparent and participatory budget process. The information system should contain complete data on the economic situation of each LGU: the level of fiscal performance, a full overview of the financial situation, and the quality of public services offered.

Only partial records of PIT payers are kept, so LGUs do not know the dimension of their most important revenue source to forecast their budgets accurately.

Access to economic and social statistical data has two major disadvantages: (a) national data are not always relevant for local economic and social development, and (b) the validation process introduces important delays of, depending on the indicators, between six months and one year for local collection, transmission to the National Institute for Statistics, validation, and return to local offices as validated national indicators.

Improvements in public services and local transportation show the most visible results to citizens. The LGUs apparently have the most relevant data on different agencies' involvement in transportation service provision and investment (the Ministry of Public Finance; the Ministry of Public Works, Transportation, and Housing; the Ministry of Public Administration; the Ministry of Development and Prognosis; and the National Cadastre Office). The existence of information on different players' activities can be beneficial for initiating partnerships to fund the capital expenditures needed for infrastructure investments, and these partnerships, in turn, can serve as examples of how information from various sources can be put together and used to benefit the community.

As indicated from the survey responses, some local authorities use the available sources of information and get the data needed, and some do not. Basically, those that have discovered how to access the sources had the financial incentives (access to government special funds, donor programs, and so forth) to do so and found ways to overcome the difficulties inherent in the system.

Public authorities' mentality should be changed from one of simply paying the expenses for a certain activity to one of discovering the purpose of that activity and learning how to manage the activity to respond to citizens' needs. Then determining the set of data needed to make decisions about the most important priorities would be easier.

Some of the indicators used at the national and subnational levels are not relevant any more or are unrealistic, for instance, the unemployment rate or the average wage (as the number of employees in the formal economy is going down, the level is no longer relevant for representing the population's welfare).

Access to statistical data is also dependent on the personnel involved in the process. Some local governments have good relationships with local institutions and have proven records of obtaining the necessary data for a variety of projects. The general perspective is in the relationship with an institution, the most important factor is the people rather than the institution itself.

Subnational statistics are not readily available, especially for comparison purposes. On the one hand, because data are aggregated at the central level and weighted, specific information is lost along the way, and on the other hand, because the data available at local level may not be validated by the NIS, specific information may not be reliable.

Some local governments do not question the significance of indicators and their relevance to their situation. To understand the indicators, the basic information and methodology regarding their calculations are needed, and they are either not available or not requested.

In some cases, the way a database is structured makes it difficult to use or not flexible enough to be adjusted to the user's needs. In other cases users do not know how to request the data.

Most LGUs may not have analytic capacities because they lack the requisite staff, and because they have no systematic local practices for using data to develop public policies and financial analyses. Some show interest in developing such capacity at the local level, and some want this capacity to be at the level of local authorities' associations or the central government (MPF and MPA). The Federation of Romanian Local Authorities wants to develop the administrative and analytical capacity based on the information needs in its negotiations with the central government.

Small cities and communes do not acknowledge a need for statistical data, not only because of the lack of relevance for their level, but also because of the lack of analytical capacity and the lack of equipment. (Because of shortage of resources, small communities cannot afford computers and specialized personnel.)

The example in box 4.1 shows that despite the lack of relevant data available and despite human resources, financial resources, and technical problems, a good decisionmaker found the means to draw up a strategy for the city. By using economic and social data, the mayor diagnosed the problems the community was facing and tried to address those problems and improve the local financial situation.

Financial Management and Budgeting

The decentralization process and new legislation brought more responsibilities to local governments for providing public services, especially social services. Functions that before 1998 had been carried out by the central government by means of various agencies at the local level have been transferred to local governments. Central government institutions and agencies play a significant role in administering information related to the services now provided by LGUs.

The MPF has close ties with the LGUs through the process of drafting, approving, and executing the budget and its implementation framework. The MPF issues norms and regulations on the sources of revenues and responsibilities regarding local government expenditures. At the local level, the ministry works with local governments through the General Department of Public Finance (GDPF), the local body of the MPF in each county. Treasury and public accounting directorates exist in each municipality, town, and significant commune and are subordinated to the county GDPF. The treasury regularly produces a series of specific statements on local budget performance along with supporting documentation.

The GDPF has an extremely comprehensive database on economic activity, and the data can be structured according to need, because it is entered per company and per payment made by each company and related to the payables to the budgets that are provided for in the annual budget law. Most of the data are taken from the balance sheets submitted by companies twice a year and from the monthly, quarterly, and semiannual statements of payables. The GDPF also has a database for calculating the global income tax. All this information is presented by taxpayers on paper (very rarely electronically), and is then processed, summarized, and sent to the MPF.

Budgeting Process

The local budgeting process begins in May of the preceding year with a draft budget that includes estimates of revenues from local taxes, fees, and shared taxes and a proposal for expenditures for the next year. The individual budget of each local council is consolidated into a single county-level budget that also includes the draft budget of the county council. The consolidated budget is forwarded to the MPF. After reviewing all budgets of local and county councils, the MPF gives each county and local council a spending limit that they will use to finalize the draft budget for the next year.

After MPF approval, each LGU can adopt its own budget for the year. First, the draft budget has to be adjusted according to the rules set forth in the current state budget law. In each year

Box 4.1 *Harsova Case Study*

This case study provides an example of how a small local council wisely took advantage of the legislative provisions and, using sound analysis of statistical data, compared national indicators with local values and designed a strategy to encourage future economic development and decrease the level of unemployment. It is a good example of a local government's use of subnational statistics to develop local policies to decrease poverty. It also shows that, in many cases, the official available data are not relevant to the existing situation. Another important aspect of this case study is the proven capacity for data collection and analysis at the local level, even within a small city. The determining factor is the willingness and ability of the decisionmaker (the mayor) to understand the need for change and find adequate solutions to the problems encountered.

Harsova is a city of 10,973 inhabitants in Constanta County, with a potential workforce of 7,000 people. The basic economic activities are related to agriculture (crops), fishing, and handcrafts.

The starting points were the provisions of the Government Emergency Ordinance (law no. 24/1998 and its subsequent amendments) and Government Decision 522/2000 regarding disadvantaged areas. The law provides government support from a special fund and special incentives to investors starting economic activities in communities declared disadvantaged based on one of the following criteria:

- The community is isolated, with no means of communication and little infrastructure, or
- The unemployment rate has been at least three times the national unemployment rate for more than three consecutive months.

Harsova's real unemployment rate was unknown, but was estimated to be higher than estimated by the local Agency for Labor Occupancy. The local statistical office does not have the unemployment rate validated for such a small sample. Because the number of companies in the city was decreasing and the number of employees within the existing companies was declining, the conclusion was that the officially declared local unemployment rate differed from the real local unemployment rate.

First, the existence of two categories of unemployed was determined and defined as follows:

- "Official" unemployed people registered with the Agency for Labor Occupancy.
- "Virtual" unemployed people who were not working and were not registered either because they had never worked, had never been legally employed, or had worked in agriculture, and therefore were not entitled to receive any unemployment benefits.

To gather the necessary data the local council hired four persons to visit all households and ask those unemployed to register with the Agency for Labor Occupancy. As a result, the number of registered unemployed jumped from 380 to 2,184. The real figure represents 31.7 percent of the total active population and was more than three times the national average unemployment rate, which was 8 percent at that time. This evidence was shown for more than three consecutive months and the basis for applying for disadvantaged area status.

This initial research phase was followed by the more complicated phases of drafting a strategy to address the problem, presenting it to the county council and regional council for approval, obtaining support from the country's representatives in Parliament, and finally receiving an official decision. As a consequence, the city was able to support efforts otherwise impossible to fund from the local budget to provide incentives for investors, for capital expenditures on the necessary infrastructure, and for research.

The socioeconomic development strategy is now being elaborated and includes measures to encourage investors to start businesses in Harsova. Based on a study of the most relevant conditions the city can offer, the targeted economic activities were selected and 200 potential investors were contacted in a campaign to attract them. As a consequence, three investors obtained the special investor certificate and started their activities, three other are in the process of doing so, and the mayor was approached by a representative of General Motors to ask about the conditions for opening a household appliances factory.

since 1991, these rules have included changes in the expenditure responsibilities of both local and county councils and also variations in the volume and types of transfers, both general and earmarked. In addition, the local councils must wait for the county council to allocate their corresponding share of the equalization grants received by the county council from the state budget. No local council knows for sure what amount it will receive from the county council. The process typically involves significant individual negotiations between the mayors and their chief financial officers on the one hand, and the county council on the other hand.

The GDPF is of special importance, because with its help, improvements to the information and decisionmaking system are made. These improvements result from using automated data processing systems so that certain operational information about budget performance is more useful for making decisions. In this context, daily information is provided about revenue collection, expenditures, deficits, and amounts available in the treasury fund, resulting in a database for improving decisionmaking. In this way the MPF has an instrument for establishing short- and long-term strategies for public finance and for establishing the rationale for the distribution of transfers to local budgets.

The information collected by the local GDPF is verified by the Department of Treasury within the MPF and is transmitted to the Budget Department. Duties of the Budget Department include synthesizing budget policy and interpreting budget data. The Budget Department is responsible for

- Analyzing draft and actual budgets
- Elaborating estimates, codes, and methodologies
- Drafting changes in the legislation
- Assigning yearly allocation of transfers from the state budget
- Making the overall decisions affecting LGUs' budgets.

MPF Capacity to Analyze LGUs' Financial Performance

Although local budget data collected according to the budget classification of the MPF allow the calculation of various indicators and complex analyses, the accounting system on the one hand, and the consolidation of data at the county level on the other hand, might make some analyses impossible. Relevant information on budget execution is systematically collected from all LGUs around the country. The way data are consolidated and reported at the county level and within the MPF does not allow for detailed interpretation. The resulted aggregated information is unsuitable for financial analyses. The impact of each local government function on the central government, the degree of independence from central level revenue sources, and the estimation of future trends are all difficult to assess because of the impossibility of accessing the MPF's database on financial information. Even if local governments could carry out some sort of analyses only about themselves (based on the budget data collected under their jurisdiction), correlating these data with those coming from other local governments and the macroeconomic context would be extremely difficult.

The MPF, MPA, and other authorities in charge of drafting policies on local autonomy and financial decentralization cannot assess the exact situation of LGUs and the impact of certain legislative measures in the short or long term, nor can they accurately monitor local public finances without detailed financial data. An example of relevant information that the LGUs, MPF, and MPA do not have—information that has a powerful impact in evaluating the managerial and financial planning capacity of certain LGUs—is the tally of unpaid bills at the end of the fiscal year. As revealed in our discussions with the MPF and MPA, no analysis has been made of the real causes and the true dimension of this phenomenon or of its "hidden" impacts on the state

budget. Although by law local governments have to operate balanced budgets, informally it is known and accepted that certain local governments show balanced budgets not only because unpaid obligations are not revealed by the accounting system, but also because of some tricks used.

National Institute of Statistics

The NIS is the specialized central public institution subordinated to the central government authorized to design the system of indicators, nomenclatures, classifications, methodologies, and techniques for data collection, processing, and dissemination to ensure a fully objective and reliable statistical database and research. The annual program of statistical research into the annual budget is approved by government decision. Various administrative data sources have been involved in the development of the national statistical system through agreements between NIS and various ministries, institutions, organizations, and agencies. The NIS has 8 regional offices and 33 county offices to collect local data, which the NIS then aggregates and validates.

County statistical offices (CSOs) are the lowest level of data collection for the NIS. Based on indicators, methodology, interview formats, and instructions elaborated by the NIS and approved by the government, each year CSOs collect data and transmit them to the NIS for use in the annual statistical research program. Each type of research has a defined objective, and methods of gathering information and deadlines are specified, as are methods for interpreting and disseminating the results (indicators, degree of detail, and prime beneficiaries). The NIS controls, compares, and validates data and then transmits the data back to the CSOs for correction, gets them back, and creates the validated final data down to the county level. Each CSO has database coherent with the national database available at the NIS. Preliminary data are published monthly in a newsletter and are sent to the prefects, county councils, and mass media.

The eight regional statistics offices administer and analyze the database to reflect regional socioeconomic development.

As statistics play a significant role in the negotiation process for Romania's integration into the EU, the NIS's cooperation with the other institutions that play an active role in the national statistical system is extremely important. After three rounds of analytical examination of the *Acquis Communautaire* in statistics, in July 2000 the NSI opened the negotiating chapter with the EU. The negotiating memorandum was signed by the president of the NIS and the 16 leaders of the most important partners of the NIS, such as the Ministry of Public Finance and the National Bank of Romania. As mentioned in the memorandum, full compliance in the fields of demography, migration, social statistics (social protection, health, workplace safety, consumer protection, vocational training, culture and education, and food consumption), and labor statistics should have been achieved by the end of 2002, based on a tight collaboration between the NIS and the Ministry of Labor and Social Solidarity (MLSS), the Ministry of Health and Family, and the Ministry of Education and Research.

Sectoral Ministries

Ministry of Public Administration

The MPA is responsible implementing the government's strategy for local governments. The MPA's most important functions are as follows:

- Designing public policies for implementing government programs at the central and local levels
- Designing the legislation and regulatory framework pertaining to local governments' activities and public service delivery

- Overseeing and supporting local governments meeting legislation requirements and EU integration conditionalities
- Collaborating with other central government institutions to create and implement the integrated information system for local governments.

The MPA collaborates with the Ministry of Public Finances to decide on yearly budget allocations of shared taxes and transfers as well as equalization grant criteria. The MPA is also coordinating the training of public servants.

The MPA has five secretariats responsible for local communities, relations with prefects, relations with Parliament, European integration, and public administration investments and information technology. The representatives of the MPA at local level are the prefects, one in each of the 41 counties and 1 for Bucharest. Their primary responsibility is implementing central government policies at the local level and coordinating the activities of different ministries' local units. Prefects' offices are in charge of collecting information on subnational governments' social and economic policies. As of mid-2002, the MPA coordinates and monitors the implementation of the National Plan for Public Administration Information Technology at the central and local levels.

Ministry of Public Works, Transportation, and Housing

The MPWTH is charged with policy design regarding infrastructure, public construction works, transportation, and housing and is entirely funded from the state budget. The MPWTH elaborates and approves the technical and economic requirements for all related fields of activity; provides technical assistance; and is responsible for the approval and funding of transportation works, housing, and infrastructure capital investments. The MPWTH's most important functions are

- Elaborating studies and programs for urban and rural development, housing, and technical and public utility works
- Analyzing feasibility studies prepared for public works approved by the central government
- Elaborating yearly programs of public works financed from state budgets and external loans.

At the central level the MPWTH has three general divisions, four specialized divisions, and a special problems service. The local level has 42 inspectorates—41 for counties and 1 for Bucharest—specialized in housing, public works, urbanization, and territory planning and local institutions for collecting buildings statistics. Detailed data are collected directly by the local divisions and reported to the MPWTH divisions. The MPWTH has cooperation agreements with the NIS and the CSOs.

Ministry of Labor and Social Solidarity

The MLSS is directly subordinate to the central government and is responsible for coordinating and implementing government strategies regarding work relations and social protection. The MLSS's most important tasks are

- Elaborating strategies, programs, and national plans in collaboration with other ministries and agencies and controlling their implementation by the national Agency for Labor Force Occupancy and the National Council for Professional Adult Training
- Drafting the Unemployment Fund budget and overseeing its execution
- Elaborating the social indicators annually, establishing the basis for the activities of the national Agency for Labor Force Occupancy, and overseeing the annual program

- Initiating, coordinating, and supervising social services programs in direct collaboration with local governments and nongovernmental organizations
- Coordinating the activities of specialized institutions providing social services that are funded from the central budget and local budgets
- Managing the National Solidarity Fund.

Directly under the MLSS are the county divisions for labor and social solidarity; national research institutes; local social assistance institutions, which are funded from extrabudgetary revenues and from the central budget; and local social assistance institutions for the elderly, which are funded from extrabudgetary revenues and local budgets. The MLSS's local divisions collect the information from LGUs, from social workers, from the local agencies for labor force occupancy, and other sources. Because of the fragmentation and numerous sources of information, the system needs to be refined and updated to meet current legislative provisions and redesigned to satisfy local needs. Collection systems for social indicators should follow the same methodology and allow comparison among counties.

The Ministry of Education and Research

The Ministry of Education and Research coordinates educational activities and has legal authority regarding the administration of the school system around the country. The ministry has a number of national consultative bodies for various academic fields and oversees activities related to reform strategies and the evaluation of educational quality at all levels, specific education needs of disabled children and children with special problems, curricula, examinations, school administration, personnel, and the overall educational plan. At the local level, the activities are coordinated by the county school inspectorates working directly with the county council and local councils where the schools are located.

Based on a central government decision (law no. 538/2001), at the level of each county school inspectorate a commission was created to determine average annual expenses for each type of preuniversity institution, based on data collected from all schools around the county and the GDPF. At the central level, within the Ministry of Education and Research, the National Council for Public Preuniversity Education Funding was created and receives data on education funding from the county commissions and from the MPF. The commission will submit to the Ministry of Education and Research criteria and standards for funding (annual average costs per student, differentiated by education level and profile). The two-year program is funded by the British Know-How Fund.

Ministry of Health and Family

The Ministry of Health and Family is responsible for the entire health system and the network of public health services, including the State Secretariat for Disabled Persons. At the local level the divisions for public health and inspectorates for public health represent the ministry. The information system of the health care services provides data upon which to base decisions at the central and local levels for health policies and for observing the results of these policies. The 42 inspectorates of the State Secretariat for Disabled Persons are responsible for coordinating collection at the local level. The secretariat's database contains information about all socially assisted people and is communicated to the county council. The software used is not always compatible with that of the local inspectorates. The NIS and the MLSS collaborate well, but many steps must still be taken to develop coordination between the funding institution and the institution that has the information base.

Ministry of Development and Prognosis

The Ministry of Development and Prognosis was set up to coordinate a more effective response to economic reform priorities. An effective response strengthens institutional capacity and helps in the elaboration and application of programs to support regional development. The main goal of the regional development policy, as formulated in the Law of Regional Development (law no. 151/1998), is to "narrow the existing regional disparities, in particular by stimulating balanced development and accelerating the recovery of those zones that are lagging behind in point of development due to historical, geographic, economic, and political circumstances and the prevention of new disparities and regional imbalances." The Green Charter of Regional Development in the 1997 PHARE program, together with the technical assistance component for institutional development, created the institutional capacity to prepare Romania for managing the EU structural funds, which will be accessible when Romania becomes an EU member.

As a result the following were created: the National Council for Regional Development, the National Agency for Regional Development, the development regions, the regional development councils (RDCs), and the Regional Development Agency. When the Ministry of Development and Prognosis was set up, at the end of 2000, the former National Agency for Regional Development was absorbed.

The National Council for Regional Development is a deliberative body, without legal standing, whose main role is to promote regional development policy. Made up of 32 members, of which 16 are representatives of the RDCs and 16 are representatives of the central administration, the council is chaired by the prime minister.

At the regional level, according to the Law of Regional Development (law no. 151/1998), eight development regions were set up by the voluntary association of counties and of the Bucharest municipality. An RDC was created in every development region as a deliberative body and a regional development agency as an executive body.

The RDC is a deliberative body whose role is to coordinate the activities and promote the objectives of the regional development policy. Every county is represented in the RDC by the county council president, a representative of municipalities, and a representative of towns and one of communes in the county. The president and deputy president of the RDC are elected from among the members for a term of office of one year, by open ballot with a simple majority. The same county representatives cannot fill these two functions simultaneously. RDCs represent the decisionmaking body for all the resolutions on regional development in their territories, setting out with the adoption of the regional development plan.

The Regional Development Agency is the lead development organization. There are eight regional development agencies. Data used by the Ministry of Development and Prognosis are basically derived from the NIS database and information collected through the agencies.

Ministry of Communications and Information Technology

The Ministry of Communications and Information Technology is mandated to ensure Romania's transition to an "information society"—a strategic objective for 2001–2004 and one of the conditions for Romania's accession to the EU. The ministry is involved in process change in the following fields: public administration (electronic government), business (electronic commerce), education (distance education), culture (multimedia centers and virtual libraries), and working style (telecommuting)—all based on expanded use of the Internet.

Ministry of Public Information

The Ministry of Public Information is the government's specialized institution to elaborate, promote, and apply the national strategy and policy for public information. The ministry, which is

directly subordinate to the prime minister and to the government, initiates and promotes specific legal regulations; formulates proposals to harmonize Romanian legislation with European legislation regarding public information; represents the state's interests at various international bodies and organizations concerning communication issues; initiates and negotiates agreements or conventions and proposes adherence to existing ones; oversees the application of legal regulations in the domain of public information; and coordinates technical assistance programs by the World Bank, the EU, and other international bodies regarding public information.

Nongovernmental Organizations

Chamber of Commerce and Industry

The Chamber of Commerce and Industry is an independent, nongovernmental, and self-financing organization with the aim of developing the private sector and market relations in agriculture, industry, and services. The CCI has 41 independent local chambers and a national office, the Romanian Chamber of Commerce and Industry, which has specialized departments for offering promotion and assistance to all private and public companies.

The Register of Commerce, constituted according to law (no. 26/1990), is organized at two levels: (a) the local level represented by the 41 county offices and that of Bucharest Municipality (offices affiliated with county CCIs), and (b) the national level represented by the National Trade Register Office, affiliated with the national CCI. The Register of Commerce keeps track of all registered companies in the county.

The CCI has proven itself to be an informational center at the county level and a useful database provider. Among all the local institutions, the CCI seems to be an information hub, having good relationships with other partner institutions and potential clients. The range of interactions in which the CCI is involved includes mainly information dissemination, know-how transfer, and consulting in evaluating projects.

A database based predominantly on general information about taxpayers is found at county CCIs. By request, the local council can obtain from this source important information on the economic situation of the locality, to be used for the analysis of the implications and for decisionmaking, as well as data for drafting budget projections based on the shares of the global income tax. The problems regarding the information available at the CCI are related to the costs of obtaining the information and the quality and reliability of data that are based on taxpayers' declarations.

Local Government Associations

Local government associations started to play an important role in representing the interests of their members to the national government and Parliament. The Federation of Romanian Authorities is the umbrella association representing all levels of local public administration and has a coordinating role among the Union of County Councils, the Association of Municipalities, the Association of Towns, the Associations of Communes, the Economic Directors Organizations (County Councils, Municipalities, and Towns), the Association of Information Technology Specialists, and other professional associations. The Federation of Romanian Authorities started to play an important consultative role following its involvement by the MPF and the MPA in drafting the new Local Taxes and Fees Law and the Local Public Finance Law. Working groups were established and are currently providing analysis for discussions and negotiations on the new regulations. Data are collected based on needs and availability. Based on the latest developments, the Federation of Romanian Authorities and professional associations have showed interest in

developing a coherent financial database and a specialized group for data analysis and policy discussions.

Table 4.2 summarizes various data systems for which information is collected and circulated between local authorities and central and local institutions. Many examples of overlap are evident between what different organizations are collecting and distributing. By creating a coordinated, coherent database that can be publicly accessible to users, it is easy to demonstrate the financial savings, for example, just for the time spent by providers and users to

- Provide the same information to several different agencies in different formats
- Find out if the needed information exists
- Find the database containing the needed information
- Double check information when similar (or the same) data from two databases do not agree
- Check the differences in methodology used, to understand what data really represents and how reliable it is.

In all cases, the database exists on hard copy and for the past two or three years also in electronic format (disk). Ministries receive data primarily on disk.

Impediments of Subnational Statistics and Conclusions

Statistics have a decisive role in monitoring the current situation and the progress recorded in all fields pertinent to negotiations relating to Romania's accession to the EU. Objective and reliable statistical information assures the accurate evaluation of economic performance and confers credibility upon the negotiations. Key quality attributes include relevance, accuracy, timeliness, accessibility, comparability, coherence, and completeness. This section discusses the shortfalls.

Modernization of Public Administration in the Context of EU Integration

Although no specific *Acquis Communautaire* covers the modernization of Romanian public administration, the EU requirements to be met are considered critical by the Romanian government and by the EU delegation in Romania. Both parties cite the need to improve the central government's capacity to conceive and, especially, implement a significant strengthening of institutional capacity at both the national and subnational levels. Earlier EU assessments have drawn attention to substantial shortfalls in these areas.

Accuracy of Data

Current systems for data collection reveal a systematic approach: the various ministries have elaborated detailed methodologies for data collection using formats that local authorities, companies, local agencies, and institutions must fill in and submit periodically (depending on the type of reporting, some daily, some monthly, some tri-monthly, some semiannually, some annually). Practically all data are collected and reported back to the related public institution.

The NIS has succeeded in achieving the quality standards required by the EU and can be held up as an example of a central institution on its way to an efficient transformation from a bureaucratic, centralized organization to a modern one.

Although many steps still lie ahead, the policy of taking action by small steps toward the goal, with clearly defined strategies in the short and medium term, has proved to be successful.

The NIS initiated collaboration with all ministries. Together with the MPA, local offices make data available to prefects for estimation purposes, but because most data are not final (that is,

Table 4.2 Data Systems Regarding Local Public Administrations

Data system	*Summary description*	*Who produces the data*	*Where the data are collected*	*Frequency of collection*	*Quality*
Own revenues from taxes and fees	Data are in part in raw form and in part indicators comparing the current month with the same month of the preceding year	GDPF—Budget Department	Prefecture	Monthly	Reporting format and indicators make this system useless
Various reporting formats for types of revenues or expenditures	Data structure is imposed by the MPA or prefecture and is based on urgent need for information on ad hoc basis	Local councils, county councils, GDPF—Budget Department	Prefecture	Whenever requested	Although based on a good idea, major errors may be made because of very short deadlines
Economic and social statistical data	Detailed social and economic data and indicators	CSO	CSO and deconcentrated local institutions, NIS	Monthly, quarterly, annually	Very good
Census statistical data	Detailed population, housing, and socioeconomic data	County Census Commission	CSO and NIS	As decreed by law	Very good
Local budget cash execution	Budget execution for revenues and expenditures compared with the budget; distinct evidence of revenues with a special destination	Treasury	Local council and GDPF	Daily or per request	Good
Accounts documentation	Evidence supporting operations in accounts	Treasury	Local council and GDPF	Daily or per request	Good
Evidence of amounts derived from shared PIT	Evidence of the calculation basis for the shares and the resulting amounts	Treasury	Local council, county council, and GDPF	Monthly	Good
"Platif" data system (Platif is a software package developed for financial management of the LGUs)	Presents analytically all payments made by each taxpayer, types of payments to local budgets, and central budget components	Treasury	GDPF	Daily or per request	Good, being improved to allow access by LGUs
Balance sheet and annexes	Detailed data for each company	Companies	Chamber of Commerce, GDPF, and MPF	Semiannually	Depends on the reliability of reported data

Balance sheet	Budget execution	Local councils and all public institutions	The first hierarchic institution in line GDPF	Quarterly	Very good
Revenues and expenditures budget	Synthesis of all local budgets based on the MPF's reporting structure	Local councils	GDPF MPF—Budget Department (Public Accounting)	Annually	Good, in electronic format and hard copy
Synthesis balance sheets	Synthesis of all local budgets based on the MPF's reporting structure	Local councils	GDPF MPF—Budget Department (Public Accounting)	Quarterly	Good, in electronic format and hard copy
Balance sheets and executed local budgets	Synthesis of executed local budgets by county	GDPF	MPF—Budget Department (Public Accounting)	Monthly	Good, in electronic format and hard copy
F02 operating system (F02 is a software package developed for financial management of the LGUs)	Among other things presents revenues and expenses execution by county; each treasury has data on communities and areas of responsibility	Treasury	MPF—Public Accounting and Treasury Department	Daily	Very good
Law no. 186/1998 evidence	Presents in special format employee numbers and salaries for each public institution	Each public institution	MPF—Public Accounting and Treasury Department	Semiannually	Very good
Various evidences of sums from the central budget to local budgets	Analyzes and synthesizes calculations based on the Annual Budget Law for equalization grants. Evidences of needs for heating subsidies for citizens.	MPF—Public Accounting and Treasury Department, County council	County council and prefecture, MPF—budget for own needs	When drafting the budget and allocation of equalization grants	Good
Court of Accounts (Post Control Division) annual public report regarding local budgets	General description of types of problems encountered during control of local councils and subordinated institutions	Post Control Division	County council, Court of Accounts, Parliament	Annually	Very good

Source: Authors.

they have not been validated by the NIS), the NIS does not recommended the use of those data for socioeconomic studies.

This caution is also the case for the relevance of information local governments have to use.

- Current data available at the local level (CSO, RSO) are not relevant because they have not been validated by the NIS. Data available within the CSO and RSO that are based on direct collection are different from data available at the NIS for the same unit and time, because of the statistical techniques normally used.
- Validated data available at the local level (CSO, RSO) may not be relevant because of the time lapse between collection and return to the CSO.
- Certain socioeconomic indicators are not relevant for LGU purposes because the lowest level of aggregation is the region, and most recently the subregion (for example, poverty data).

Although the NIS intended to develop the capacity to design and produce analysis of the data collected, currently what the NIS offers is a set of snapshots of the set of indicators. These snapshots can be used for further interpretations and analysis. As evidenced by the NIS, an important number of indicators seem to go unused by the other institutions.

One of the problems (Panduru 2002) the NIS is facing is the use of administrative data sources for statistical purposes. Although data may be comprehensive and cost the NIS little to collect, quality problems and differences in the design are evident between the administrative and statistical purposes. The major difficulties are the following:

- Administrative data are provided in aggregated form. The aggregation of primary data is made depending on the public institutions' requirements and most often does not satisfy the requirements of statistical data users.
- Classifications and nomenclatures used by different central administration institutions differ. The NIS initiated efforts to generate some unique classifications and nomenclatures in compliance with European standards.
- Information on central and local public administration activities is limited.
- Information systems across county agencies differ.

Each institution has its own collection methodology, set of indicators, and database. Often overlaps and differences create inconsistencies between figures collected by different ministries from the same sources. These inconsistencies are caused by the complicated formats, differences in methodology interpretation, and confusion between data that seem to be similar.

Fragmentation and lack of cooperation are apparent at both levels; no institutional structure consolidates the information and uses it for the diverse purposes in a coherent way. Also at the central level, the perception that additional time and effort are needed for cooperation among sectors discourages coordination attempts.

Statistics have a decisive role in monitoring the present situation and the progress recorded in all fields. This progress constitutes the object of the negotiations on Romania's accession to the EU. Objective and reliable statistical information assures the accurate evaluation of economic performance and confers the credibility on the negotiations.

The point is not so much the pure existence of statistics but the recognition of their quality. The central government, as well as the local governments, need to prepare polices that are based on proper observation of the facts. Local governments need to assess the overall socioeconomic performance of the community in all areas over the years. For policy purposes, local governments also need to have the ability to compare their performance with those other local governments and determine the most appropriate ways to achieve improvement.

One of the most important future goals is to be able to use appropriate statistics to prepare and elaborate policies. The main areas in which statistics have particular significance are the preparation of

- Short-term and medium-term government strategies and the action plan for the overall fiscal decentralization process
- Local policies supporting socioeconomic development and improving services delivered to citizens.

Coordination and correlation between the various sources of information will improve and ease the elaboration of policies and will help improve the decisionmaking process regarding the allocation of funds at both the central and local levels.

Local governments are the prime source of information for many systems, but one of the problems most LGUs have is the lack of permanent access to a database developed using the information provided by the LGUs. Whenever needed, especially when financial incentives have been accessible, local decisionmakers have found ad hoc solutions or used proxy data, but this style of governance needs to be changed. The system should be public and reliable and should allow permanent access.

The fact that local authorities are mandated to cover the costs of certain activities (for example, education, health, and social services) but not manage the activities reduces their interest in using efficient managerial tools. If LGUs change their roles from simple payers for services and take charge of the policy for those services at the local level, their interest in having the data upon which to base their decisions will increase. The types of mandates transferred limit local authority and accountability. Local governments need to make different types of decisions to respond better to citizens' needs.

Together national and local decisionmakers should determine the subset of data that is absolutely necessary for each level of LGU, show where data are currently available, and develop a simple plan to create a reliable system that allows permanent public access.

A complex process of harmonizing the statistical tools is needed, so that the indicators, methodologies, and techniques applied can be coherent at the national level and comply with international norms and standards. The logistic and operational framework to ensure the definition and coherent comparison of the strategies, programs, plans, and projects for development should be established.

As mentioned in the European Union (2000) document signed by the leaders of the most important NIS partner institutions (all institutions are committed to taking all necessary actions to allow for appropriate changes in the administrative and organizational environment in which the national statistical system is functioning to increase its effectiveness.

Thus the foundation for creating unitary methodologies and developing statistical competencies in government institutions, for promoting a basic statistical culture at the national and local level, and for strengthening cooperation between all partners has been set up and should be consolidated by a coherent plan for common action in the future.

The quality of statistics depends on a country's general administrative capacity on its public service performance, and on its capacity to recruit and retain qualified people.

Limited Financial Resources

The overall economic crisis and the decrease in the public budget has a dual role: on the one hand, it fosters the change in perspective regarding efficiency, and on the other hand, it limits innovations that require financial, material, and human resources. In public institutions, resources

and staff limitations, as well as perceptions of deadlines, often block the preliminary thinking necessary to launch change. Because of limited financial resources, local governments can afford neither to pay and attract the specialized personnel needed to develop departments for data collection, analysis, and technical support for policy drafting nor to pay other institutions for studies of such sort.

Human Resources Management

Most central and local institutions have problems related to the number of personnel. Because of budget constraints, the staffs have been diminished. For instance, in comparison with other EU candidate countries, Romania has 10 statisticians per 100,000 inhabitants, compared with Bulgaria with 22 statisticians per 100,000 inhabitants, Poland with 21, Hungary with 20, and the Slovak Republic and Slovenia with 19.

Most public institutions visited revealed that the major problem is the human resources turnover. This problem has a number of causes:

- Public servants' wages are usually lower than those in the private sector. As a consequence of the numerous training courses funded by international donors, most of the personnel improved their professional capacities and migrated to the private sector to find higher pay and better professional incentives.
- Budgetary constraints on public institutions dictated cuts in personnel numbers and structures for most ministries.
- Lack of professional recognition, skills, and knowledge led to
  - Absence of individual incentives and training
  - Lack of final objectives
  - Frustrations and lack of interest
  - Skills for policymaking that are not connected with managing statistical data.

Legal Restrictions

The legal and regulatory framework is important for public organizations. It incorporates rights and duties, protection, and guarantees related to the activities of the whole system. For statistical research, according to statistics law, every new research area needs to have the methodology (and indicators, instructions) approved, usually annually by government decision.

Technical Problems

The introduction of new technology and software plays an important role. Although local councils now have computers from the city level up, how extensively they are used varies from one LGU to another. Software programs also vary from LGU to LGU. Computer use depends on the professional staff's abilities and their openness to change. Different software programs used for database administration in the county and national institutions sometimes impede access at local level.

Some software used does not allow data extraction from the format initially designed nor permit customization based on different needs.

Cultural Factors

In Romania, the central government institutions have been characterized by a high degree of rigidity and bureaucracy. To promote the change, Romanians must face institutional barriers that

are specific to public institutions. Basically, the most important obstacles to promoting an important change in the system are

- *Centralized institutionalized logic: distrust among partners.* The Romanian public system is based on a strong centralized, institutionalized logic, and most activities are dependent on the orientation and control of the key decisionmakers. The system does not facilitate innovation. Hierarchy plays an important role. At the level of various ministries, a certain distrust remains in the willingness of local public authorities to absorb the new competencies and to develop and implement strategies. The same attitude of distrust can be found in the assertion of the representatives of the local institutions with regard to the abilities and competencies of the national-level institutions. The consultative process between the MPF, the MPA, and local governments associations, which has been in place throughout 2002, demonstrates the excellent opportunities and possibilities of cooperation when parties work toward similar goals, even if their interests may differ. For example, the interests of county council presidents regarding the allocation of equalization grants differ from the mayors of subordinated LGUs, but the goal of both is fiscal decentralization.
- *Decisionmaking complexity.* Decisionmaking complexity, characteristic of public organizations, represents the major obstacle to innovations, and the decision to change is extremely difficult. Often no decisions offer the convenience and comfort of the familiar routine, so previous actions are often repeated.
- *Bureaucratic slow pace.* The essence of bureaucratic functioning is based on stability and routine. Everything is regulated by precise procedures.
- *The authority system.* The hierarchical structure of public organizations is based on the role of the leaders who give orders to subordinates; orders are followed directly without question. This structure does not encourage autonomous thinking and does not recognize personal initiative. Any flaw or exceptional situation must be discussed by the heads of the institution, thus implying slowness within the organization that harms its evolution.
- *Dimension and complexity.* Public institutions in Romania often function within a complex web of institutional structures, which has a negative impact on innovation and decisionmaking.
- *Rejection of subjectivity.* The traditional principles regarding the bureaucratic organization were conceived to eliminate subjectivity, but eliminating subjectivity sometimes leads to rejecting any new idea that might integrate dimensions other than the standardized procedures.
- *Fear of risk.*
  - Being trained in and used to applying general norms, civil servants are not used to uncertain and risky situations. Evolution and modernization bring in the unknown and often create apprehensions, hence the classic phenomenon of resistance to change.
  - The risk factors determine a certain routine in public institutions, whether central or local. The lack of flexibility varies from one institution to another and between departments within each institution, based on individual characteristics. Because of the routine and bureaucracy, reaction to legislative and program changes is delayed. For instance, changes in social services are reflected in the interviews, and therefore in data, two years after the introduction of the change.
  - To be feasible and show results, the solutions to the current problems must be simple to implement and taken one step at a time.

Management and Organizational Issues

At the level of the national institutions, a lack of cooperation is evident. Cooperation and partnership among the ministries are difficult because of the heavy and bureaucratic systems of such

institutions and because each ministry tends to act as an autonomous institution, the most knowledgeable in its field. Even when interministerial commissions are established and they convene, their role is mostly formal and consultative. Working groups among key stakeholders are moving ahead slowly because of the reluctance to admit inconveniences, to put the real problems on the table, to find solutions, and to implement them.

Access to Information

Access to information is still limited. Most public servants are afraid of transparency and hesitant to share information because of

- The effort needed to produce the information in a different format
- Fear that they may lose control over the information
- Fear that the way the information is used or the purpose for which the information is needed may turn against them.

Full disclosure of financial information is important for policy analysis and decisionmaking. The access should be on a permanent basis, in detailed form, and simple.

Final Remarks by Workshop Participants

After an initial normal reluctance to adopt such an ambitious initiative, during the discussions of the workshop held May 23, 2002, the key stakeholders revealed a desire to look into the future. After evaluating the current system and the problems, they suggested evaluating the need to develop a new system that would solve the problems identified and preparing action plan.

A first step can be a snapshot of all types of data collection that are made on regular and permanent basis by each central public institution and its local agencies. The inquiry might be structured around the following basic questions:

- What institution collects the information?
- From where is the information collected? (Which institution is providing the information? What department?)
- What information is reported?
- What is the periodicity of the request?
- What is the quality of the information? (What is the professional expertise of the persons reporting? The accuracy of data? The reliability?)
- Where is the information reported and archived?
- How accessible is the database?
- With what other sources is the database coordinated?
- What data disclosure measures exist to protect privacy and prevent misuse?

The next step might be to design a national informational system based on identification of

- The most important socioeconomic indicators needed
- The most important financial indicators needed
- The responsibilities of each institution within the system
- Users
- The system administrator
- The institution able to modify the data

- Definition of methodology
- A clearly defined set of rules to apply.

The fact that participants expressed interest in moving forward on this path is a clear signal that cooperation is desired and they are ready to take action. This attitude also reveals the need. Revealing the need is a second step forward, because programs that are artificially imposed by foreign donors without the key stakeholders' full commitment encounter difficulties in implementation.

In the process, we believe that close coordination with other donors actively involved in funding fiscal decentralization and statistics programs in Romania is important. As mentioned in the previous sections, the EU programs have been funding NIS activities to achieve, among others, the following objectives:

- Create opportunities to develop projects with the most important data providers in the central government
- Improve the legal basis to stimulate the development of official statistics services by adopting the appropriate EU legislation
- Enhance the role of the NIS as methodology coordinator
- Plan an inventory of administrative sources
- Update the NIS's collaboration agreements with its administrative partners
- Define a strategy for statistical cooperation with partners in various sectors.

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5

Slovak Republic

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According to the *World Development Report 2000/2001* (World Bank 2001), poverty has dimensions beyond income—it also has political and sectoral aspects. The sectoral dimension of poverty is represented by the access to primary services: basic health services, education, social security, and so on. Central governments have been responsible for such services during the course of transition, organizing them mainly through separate ministries and authorities subordinated to those ministries. The ongoing reforms, however, are shifting the responsibility for the provision of numerous basic services to the lower, self-governmental components of public administration, which in the case of the Slovak Republic means to the self-governing regions and municipalities.

To provide effective and accessible public services, mainly at the level of larger municipalities and regions, those regions and municipalities must have as much detailed local or regional statistical data as possible and must also be able to use them effectively.

Decentralization, Public Services, and Regional Differences

This section deals with the level of decentralization and provision of public services of regional and local importance. The Slovak Republic is currently experiencing the most significant decentralization movement in its short history, and for this reason, describing the present situation is almost impossible. Thus this section first explains the situation as of January 1, 2002, and then shows the differences, which are to take place gradually, during 2002–2004. It moves from general information on municipalities and regions, through differentiation between them, up to an analysis of the course and content of decentralization and responsibility for public services and their financing.

The Course of Decentralization: 1990–2002

The reform of public administration and related decentralization of public authority in the Slovak Republic has been taking place since 1990. This process started with the establishment of municipalities as the basic units of local government. The establishment of municipalities in 1990–1991 meant

- Abolition of the system of national committees integrating the local, district, and regional public administration into one integral unit

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- Establishment of a dual system of state administration and self-government, in which the level of self-government was represented by municipalities
- Elections to the new municipality bodies
- Transfer of property and selected competencies to municipalities.

During the period 1991–2001, changes within the central and local state administration took place. From the viewpoint of this study, we must turn our attention to the deconcentration of state administration, which was accomplished in 1996, and which meant the

- Creation of 8 regions and 79 districts as the units of state administration whose representatives were appointed by the government
- Transfer of fundamental competencies in the area of public services to the regional authorities or district offices governed by political nominees of the central government.

From December 1, 2001, the subsequent stage of public administration reform started with the election of the newly established regional governments.

The Institutional Structure of Decentralization

To understand the decentralization movement, and the actual events at the regional and local levels, we must analyze individual actors in the field of public authority operating within the region.

First are the central bodies of state administration, that is, ministries and the so-called quasi-ministries (bodies with similar status as a ministry, but without a minister, for example, the Statistical Office, the Antimonopoly Office, and the Public Procurement Office). These bodies are responsible for

- National public policy and its instruments, in particular, the legislative framework ("the rules of the game")
- In certain cases, distribution of financial resources (for example, the Ministry of Agriculture allocates subsidies to agriculture, and before decentralization the Ministry of Transportation, Posts, and Telecommunications managed roads through the Road Administration)
- In certain cases, the management, establishment, and dissolution of some providers of public services (for example, the Ministry of Health was responsible for most hospitals before decentralization).

A minister or chairperson (in most cases appointed by the central government) heads a central body of state administration. Accordingly, with some exceptions, this representative is a political appointee, managing the area concerned on the basis of a vote of confidence by the National Council. A central body of state administration employs civil servants who form a politically independent civil service as of April 1, 2002, pursuant to the Law on Civil Service (law no. 312/2002).

Since 1996 these bodies have had no hierarchical superiority over regional and local state administrations, which were not required to implement their instructions although they were supposed to respect their policy guidance. Regional offices and district offices represent regional and local state administration.

From 1996 until decentralization a regional office had the following specific areas of responsibility:

- Directly managed, established, dissolved, and funded providers of public services of regional importance (for example, secondary schools, some social services, cultural centers)
- As a manager of an independent budgetary chapter in the central government budget, allocated money to district offices and thus financed providers of public services of local importance.

From 1996 until decentralization a district office directly managed, established, dissolved, and funded providers of public services of local importance (for example, primary schools, preschool and school facilities, some social services).

Both regional and district offices are headed by a chief executive appointed by the central government. Thus he or she is a political "envoy" of the central government. As the government directly appoints both the regional and the district chief executives, no hierarchical relationship exists between them. The regional and district offices employ civil servants who form a politically independent civil service as of April 1, 2002.

Regional offices in eight regions with chief executives as state administration representatives have been in existence since 1996. Since December 2001, eight offices of self-governing regions with a directly elected chairperson and directly elected council are also in operation. The chairperson of a self-governing region, who is elected using a system of two-round elections, represents the self-governing region in external relations, in particular in the capacity of a statutory body in property, labor, and other relations.

Furthermore, the chairperson decides matters for which decisionmaking on the rights and obligations of legal entities and individuals is vested in the self-governing region by law. The chairperson may also veto regulations adopted by the council; however, these vetoes may be overridden by a majority of all councilors.

The council is a board composed of councilors who are elected in direct elections by plurality in multimandate constituencies. The council has a wide range of powers defined by law. The most important powers include the following:

- Normative (approval of regulations of a self-governing region)
- Financial (approval of budget)
- Policymaking (design of development programs for the region in all relevant branches)
- Oversight (audit of economic management of the region and the legal entities established or owned by it and election of the chief controller)
- Management (establishment and dissolution of legal entities, appointment of managers, determination of the structure of office of the self-governing region).

The division of powers within municipalities is similar to that within the self-governing region, but in a municipality, the executive power is vested in the mayor and the legislative power is vested in the municipal or city council.

Employees of a municipality or a self-governing region are public servants subject to the system of public service. The law formally provides for the political independence of these employees, but contains no instruments for its real enforceability, except for the regulation of competitive hiring procedures for managerial positions. The law also regulates their remuneration.

Local and regional public services are also provided by public and quasi-public institutions other than state administration and self-governments. These institutions are

- The so-called tripartite public law institutions, which are jointly governed by the government and representatives of labor unions and employer unions, for example, the National Employment Agency, the Social Insurance Company, and the General Health Insurance Company
- Regional professional associations, for example, the association of pharmacists and the association of medical doctors.

Such public law institutions are essential for the provision of social and health services, including services in the area of the labor market. These will be discussed in more detail later, but as the regional professional associations have a somewhat indirect influence, they will not be analyzed here.

Assigning Service Delivery Responsibilities

Public services at the regional and local levels include those being executed:

- By the state administration
- By self-governments
- Otherwise (this designation concerns the services provided by tripartite public law organizations).

Public services being executed by the state administration may be executed directly by the state administration or the state may vest them in a self-government. Until January 1, 2002, the responsibilities for the provision of public services were divided in the following way:

- General public services—as appropriate, all levels.
- Defense—exclusively by the central government.
- Public order and security—predominantly by the central government through a directly controlled network of the national police and other similar bodies. Some municipalities have their own police; however, they have limited power. Bratislava and Košice are responsible for their own fire brigades.
- Education—exclusively the central government through the regional and district offices.
- Health—exclusively by the central government through the public law health insurance system, central government budget, and public facilities established either at the central level by the Ministry of Health, privatized, or gradually transferred to municipalities.
- Social security and protection—predominantly by the central government through public law institutions or district offices. Municipalities may pursue additional activities.
- Housing and related services—directly as a public service by the municipalities, to which the relevant state apartments were transferred, and which may apply to participate in national support programs for the construction of new apartments. Municipalities are mostly responsible for maintenance and operation of public lighting, waste collection and disposal, and so forth.
- Culture—predominantly by the central government through regional and district offices. Municipalities may pursue additional activities.
- Agriculture and the economy—exclusively by the central government.
- Transportation—predominantly by the central government through specialized organizations owned or managed by the central government, except for local transportation in the five largest cities and maintenance of communications of local importance in all municipalities.

Accordingly, until January 1, 2002, the bodies and organizations of state administration (regional offices, district offices, and legal persons established or funded by them) and public law organizations carried out the majority of public services of a regional and local nature. Between January 1, 2002, and January 1, 2004, most of the responsibility for these services is being transferred to self-governing regions and municipalities and the organizations set up or funded by them. Table 5.1 contains a schedule of the transfer of competencies to the self-governing regions and municipalities.

In practice, the transfer means that the key public services listed in the first two columns of table 5.2 will gradually be decentralized within over two years. State administration, however, will still continue to be directly responsible for some activities, even after January 1, 2004. These activities are listed in the third column of table 5.2.

Table 5.1 *Schedule for the Transfer of Competencies within Decentralization*

Date	*Competencies transferred*
January 1, 2002	Registries, water management, civil protection, local railways, and regional development
April 1, 2002	Road transportation, social support, and culture and training activities
July 1, 2002	Education system, sports, and health and pharmacies
January 1, 2003	Urban planning and building regulations
January 1, 2004	Road administration

Source: Law no. 416/2001 Collection of Laws.

Even more important, public law organizations shall maintain their functions and continue to perform their duties as listed in table 5.3

Financing Local and Regional Public Services through Municipalities

Because the self-governing regions did not exist until January 1, 2002, we address fiscal relations between the central government and municipalities only.

Revenues of Municipalities

Total revenue in the context of public finance is shown in table 5.4.

Local taxes. Local taxes include real estate tax involving fuel duty, tax on construction, housing tax, and tax on nonresidential premises. The owner of real estate pays this tax, as a rule, directly to the municipality where the property is located. Even though the tax is not based on the market value of the real property concerned but on its size or other quantitative characteristics, it

Table 5.2 *Selected Key Decentralized Public Service Responsibilities after January 1, 2004*

Municipalities	*Self-governing regions*	*State*
Primary schools and preschool facilities	Secondary schools	Grants, subsidies, and supporting programs for the economy and agriculture
Amenities for social services and social support	Some areas of social protection	Administration of social benefits
Local roads	Regional roads	Public order protection by the national police, the prosecutor's offices, and the courts
Local health care (for example, ambulance service and first-category hospitals)	Regional health care (for example, pharmacies and second-category hospitals)	Urban planning of the region's municipality
Urban planning of the municipality	Regional timetables (traffic schedules)	Theaters, museums, galleries, and libraries

Source: Law no. 416/2001 Collection of Laws and other sources.

Table 5.3 *Responsibilities of Selected Public Law Institutions*

National Labor Bureau	*Social Insurance Company*	*General Health Insurance Company (insurer for most citizens)*
Collecting mandatory premiums of employers and employees in a given area	Collecting mandatory premiums of employers and employees in this branch	Collecting mandatory premiums of employers and employees in this branch
Finding jobs for the registered unemployed	Paying retirement, disability, and other types of pensions	Reimbursing for medical services, medicines, and other expenditure to the providers of health care, pharmacies, and so forth
Paying unemployment benefits to the registered unemployed	Paying sickness benefits to the disabled	
Maintaining an active labor market policy (job matching, retraining, and so forth)	Paying certain other social allowances	

Source: Relevant laws.

tries to approximate taxation based on market value through the application of coefficients according to the size of the municipality and the option for a municipality to increase tax rates in accordance with local conditions.

Local charges. Municipalities may collect various local charges, which can be considered to be de facto local taxes. The municipality can, but does not have to, collect such charges; however, their maximum amounts are limited by law. According to proposed amendments, these charges should be transformed into local taxes, which they de facto already are. Local charges include charges for the following:

- The use of public premises
- The use of apartments or parts of apartments for purposes other than housing
- Accommodation capacities
- Spas and recreation
- Dog license
- Entrance fee for museums and so on
- On sales of alcoholic beverages and tobacco products
- Entry into historical parts of cities with a motor vehicle
- Advertising
- Gambling machines
- Automatic vending machines.

These charges are included in table 5.4 in the "Fees, sales, and fines" line.

Furthermore, the municipalities levy charges for air pollution and waste collection and disposal. Since January 1, 2002, the charges for waste collection and disposal are stipulated by new legislation, pursuant to which the municipalities shall set this charge individually up to a maximum amount prescribed by the law. Because a new system has just been implemented, determining the range of the charges collected is impossible.

Table 5.4 *Total Revenue by Level of Government, 1998–2000*

(millions of Sk)

	Central government			*Social security funds*			*Local government*			*General government (consolidated)*		
Revenue	*1998*	*1999*	*2000*	*1998*	*1999*	*2000*	*1998*	*1999*	*2000*	*1998*	*1999*	*2000*
Tax revenue												
Taxes on income, profits, and capital gains	61,700	62,252	59,978	0	0	0	6,817	6,855	7,667	68,517	69,107	67,645
Social security contributions	0	0	0	111,535	115,094	129,769	0	0	0	111,535	115,094	129,769
Taxes on payroll and workforce	0	0	0	0	0	0	0	0	0	0	0	0
Taxes on property	1,291	1,538	1,622	0	0	0	3,211	3,357	3,606	4,502	4,895	5,228
Taxes on goods and services	79,596	85,376	100,607	0	0	0	1,364	1,382	1,515	80,960	86,758	102,122
Other taxes	11,664	12,534	13,181	0	0	0	10	14	11	11,674	12,548	13,192
Total tax revenue	154,251	161,700	175,388	111,535	115,094	129,769	11,402	11,608	12,799	277,188	288,402	317,956
Nontax revenue												
Operating surplus of departmental enterprises and property income	5,256	32,614	7,011	2,005	1,414	737	1,023	856	951	8,284	34,884	8,699
Fees, sales, and fines	7,163	8,421	8,612	124	143	477	1,991	2,125	2,660	9,276	10,689	11,749
Contributions to government employee pension funds	0	0	0	0	0	0	0	0	0	0	0	0
Other nontax revenue	5,574	7,893	11,202	754	750	1,146	1,018	612	386	7,348	9,255	12,734
Total nontax revenue	17,993	48,928	26,825	2,883	2,307	2,360	4,032	3,593	3,997	24,908	54,828	33,182
Grants	26,695	23,703	25,383	0	0	2,066	3,679	3,426	4,574	30,374	27,129	32,023
Total revenue	198,939	234,331	227,596	114,418	117,401	134,195	19,113	18,627	21,370	332,470	370,359	383,161
Tax revenue as a percentage of gross domestic product	20.5	19.8	19.8	14.8	14.1	14.6	1.5	1.4	1.4	44.3	45.4	43.2
Subnational tax revenue as a percentage of total tax revenue	n.a	n.a	n.a	n.a	n.a	n.a	4.1	4.0	4.0	n.a	n.a	n.a

n.a. Not applicable.

Note: As the regional level of government did not exist until December 2001, it is not shown in the table. Regional and local state administration is included in the central government data, because it was a decisionmaking and fiscal hand of the central government.

Source: Ministry of Finance data.

Municipalities' shares of national taxes. The municipalities have a relatively stable mechanism for allocating certain tax revenues; however, the actual quantitative implementation of this mechanism differs between years and is a political and fiscal decision made by the central government in negotiation with representatives of municipalities.

- Out of the tax on personal income from employment and from emoluments of employment, the amount (Sk 7.3 billion in 2002) is allocated to municipalities on a per capita basis.
- Out of corporate income tax, 6.27 percent is allocated to municipalities, 60 percent of which is a per capita allocation and 40 percent of which is allocated according to taxpayers' registration offices.
- Road tax is allocated in a different manner in the case of Bratislava and Košice as compared with other municipalities. Bratislava and Košice receive 60 percent of the road tax levied by tax revenue authorities within the city; other municipalities receive 40 percent. The difference is a result of the higher level of responsibility of these two cities for the roads in their respective territories.

The total sum of income taxes collected during 1998–2000 can be found in table 5.4 in the "Taxes on income, profits, and capital gains" row.

Subsidies for municipalities. Along with a share of national taxes, municipalities also receive subsidies directly from the central government budget. The following are types of subsidies for municipalities:

- For municipal public transportation, Sk 1,533.6 million in the central government budget for 2002. The subsidies are awarded to the five largest cities that operate their own systems of municipal public transportation (Bratislava, Košice, Prešov, Žilina, and Banská Bystrica) based largely on past subsidies.
- For the performance of self-governing functions, Sk 582 million in the central government budget for 2002. These subsidies are awarded to small municipalities that have populations not exceeding 3,000 citizens as compensation for their small size. These subsidies are calculated according to a formula taking into account two factors: the number of citizens within the municipality (degressive formula), and the value of land in the municipality according to data related to real estate taxes.
- For the completion of primary school facilities and the provision of technical equipment within the framework of the former complex house building (complex house building refers to the government program of constructing housing complexes during the communist regime), Sk 167.4 million in the central government budget for 2002. These subsidies are awarded on a case-by-case basis in areas where the implementation of such actions had started before 1989.
- To meet individual needs of the municipalities to ensure performance of their self-governing functions, Sk 142.5 million in the central government budget for 2002. These subsidies are awarded to cover needs in the largest cities to ensure funding of functions that in other municipalities are executed by the central government, for example, the fire department.

Before 2002, the central government provided many capital subsidies to municipalities from central government funds. As of January 1, 2002, most of these funds were terminated and financial resources were transferred to the respective budget chapters. The State Fund for Housing Development has been preserved.

Table 5.4 shows subsidies for 1998–2000 in the "Grants" line.

Expenditures of Municipalities

Table 5.5 shows expenditures by different levels of government in 1998–2000. The municipalities are represented in the "Local government" column; the "Central government" column also includes the expenditures of regional and district offices and of public law institutions. The table indicates that before decentralization, the municipalities had only a small share in public expenditure, except for housing, transportation, and culture and recreation, in which their share in public expenditure was more significant. Because of the decentralization changes between 2002 and 2004, we can expect a shift of a large amount of resources allocated for education to the regional and municipal level and another significant increase of their share in culture and transportation expenditure. Expenditures on defense, health care, social security, agriculture, and economy will remain in the hands of the state administration and public law institutions.

Financing Local and Regional Public Services through Regional and District Offices

Before 2002 most local and regional public services were financed through the regional and district offices. Each of the eight regional offices had its own budget chapter within the central government budget, from which it directly financed its own expenditures and transferred finances to the district office in its region, which in turn used them to finance its own expenditures.

Budgetary limits of individual budget chapters of regional offices have not been determined on the basis of a uniform system but rather on the basis of the following:

- Budgetary limits are set to ensure resources for salaries and insurance premiums for the current employees of the existing institutions that are fully funded from the central government budget and, to a certain extent, for the institutions receiving contributions from the central government budget.
- In the field of expenditures on goods and services, no systematic approach can be seen.

No legal regulations bound regional offices in the allocation of resources for their own expenditures or in transfers to individual district offices. In practice they acted to ensure that salaries and levies for current employees of the existing institutions were fully funded from the central government budget and, to a certain extent, to ensure that the institutions received contributions from the central government budget, and to solve the most urgent problems in the field of goods and services.

In general, the manner of redistribution before 2002 was based on the network of existing public organizations funded by regional and district offices.

As noted earlier, between January 1, 2002, and January 1, 2004, the responsibility for providing many public services is gradually being transferred to the municipalities and self-governing regions. The following key characteristics are typical for this process:

- Existing property, financial resources, and employees are being transferred to the municipalities and self-governing regions.
- To allocate financial resources for the future years, with the exception of expenditures on primary and secondary schools, the current expenditure is derived primarily from past expenditures or is based on how many public facilities are needed in a given region or municipality.
- Public service resources are allocated through the chapter of the central government budget entitled "Financial relations to the municipalities and self-governing regions."
- With the exception of primary and secondary schools, a normative procedure of allocating financial resources to the self-governing regions and municipalities for their new competencies has still not been established.

Table 5.5 Current Expenditure by Function and Level of Government, 1998–2000

(millions of Sk)

Expenditure category	*Central government and social security*			*Local government*			*General government (consolidated)*		
	1998	*1999*	*2000*	*1998*	*1999*	*2000*	*1998*	*1999*	*2000*
General public services	17,065	18,108	23,276	5,501	5,908	5,672	23,192	24,685	29,660
Defense	14,967	14,444	16,697	5	9	9	14,972	14,453	16,706
Public order and safety	16,065	12,261	13,744	672	692	701	16,860	13,079	14,574
Education	30,735	32,200	34,503	66	52	48	30,802	32,629	34,550
Health	52,704	56,827	62,856	156	145	147	52,879	57,014	63,020
Social security and work	80,138	88,544	94,477	395	429	443	80,138	88,544	94,477
Housing and municipality amenities	5,511	5,349	5,479	9,616	7,695	9,460	14,962	16,790	14,759
Recreational, cultural, and religious affairs	5,527	4,588	5,818	2,154	1,957	2,125	7,703	6,647	7,967
Fuel and energy	3,664	1,798	148	54	0	0	3,718	1,863	148
Agriculture, forestry, fishing, and hunting	14,538	10,405	16,721	755	607	856	15,293	12,445	17,591
Mining, manufacturing and construction, except fuel and energy	3,771	944	5,368	178	82	61	3,953	1,026	5,428
Transportation and communication	3,372	5,728	11,928	3,342	3,135	3,224	6,476	3,148	15,017
Other economic affairs	18,053	23,196	30,292	729	906	969	18,785	23,686	31,125
Other functions	23,647	25,564	24,795	889	1,030	1,107	24,536	26,594	25,902
Total current expenditure	289,757	299,956	346,102	24,512	22,647	24,822	314,269	322,603	370,924
Current government expenditure as a share of gross domestic product	38.6	36.8	39.0	3.3	2.8	2.8	41.9	39.6	41.8

Note: As the regional level of government did not exist until December 2001, it is not shown in the table. Regional and local state administration is included in the central government data, because it was a decisionmaking and fiscal hand of the central government.

Source: Ministry of Finance data.

- Since January 1, 2002, primary and secondary schools have been funded according to rules established by law. The law prescribes the distribution of resources for education on the basis of funding formulas. The system does not make use of any socioeconomic indicators but rather is based on the number of classes and the number of students in a class.
- Health services represent a special case. So far, the most important health centers have been funded by the Ministry of Health; however, financial flows went through the so-called insurance system. During the 1990s and 2000 and 2001, the process of privatization of general practitioners and local health centers was gradually taking place. As part of the decentralization process, the ownership of hospitals and larger medical centers, except for facilities of national importance, is being transferred to the municipalities and self-governing regions. Funding has not changed yet, and it continues to go through the insurance system.
- During decentralization, central government ministers were supposed to devise a formula for funding individual public services, but the ministers did not comply, so no final document was approved. The effective law on budgetary rules stipulates, in article 33, that "in order to protect financially weaker municipalities and self-governing regions and to ensure sufficient level of services provided to the citizens, in the course of performance of the self-government functions the procedures of financial equalization shall apply, by which the differences between potential revenue and expenditure of a municipality and a self-governing region shall be partially corrected." Pursuant to the law, financial equalization is achieved by the systems of vertical and horizontal equalization.
- The central government uses vertical equalization to redistribute resources for public expenditures between municipalities and self-governing regions. The instrument of vertical equalization is the decentralization subsidy from the central government budget: a transfer. A decentralization subsidy is supposed to be provided on the basis of factual and financial formulas stipulated by special regulations, but if such formulas do not exist, the Ministry of Finance shall determine the subsidy on agreement with the ministry responsible for that service.
- Horizontal equalization, which offsets the differences in generation of own revenues of the municipalities and self-governing regions, cannot be used because its use should be regulated by a special law, and at present no such law exists.

In the medium-term perspective (probably from January 1, 2004), greater fiscal decentralization is envisaged. Greater decentralization would transfer many more significant activities to the self-governing regions and possibly to the municipalities, and these would require the governing bodies to set tax rates for the income taxes levied in their territories. Most of these taxes would probably be in the form of a surcharge to the basic tariff. The administration of these taxes will probably be carried out by the state administration.

Impact of Decentralization on the Need for Subnational Statistical Data for Fiscal Purposes

As noted earlier, before January 1, 2002, the only intergovernmental subsidies were direct subsidies to municipalities from the central government budget. These subsidies were and still are either per capita based or based on another category that requires simple data. Therefore detailed statistical data were not needed to redistribute funds. Decentralization creates a growing need for local and regional statistical data.

As decentralization progresses and municipalities begin to provide more public services, the need to redistribute funds from the central government to the municipalities grows. If the redistribution system is to target the poorest municipalities or areas requiring special financial aid, it will require more than just the simple systems currently in use.

At the same time, a new type of redistribution occurs: from the center to the autonomous self-governing regions. Basing budget allocations to self-governing autonomous regions on the budgets of the administrative regions would be wrong, because the relationships with administrative regions until now were determined by a combination of (a) historical incremental budgeting, and (b) financial needs based on the network of public facilities that are run by the administrative regions. This situation was not politically and socioeconomically sustainable in the long run, even in the system where regions were just an arm of the central government. It would be even more of a problem with new self-governing regions, which have a high level of autonomy and legitimacy in decisionmaking.

If the autonomous regions and municipalities are to be highly independent in the use of resources, the need for data is and will be relatively small. The per capita principle together with some other socioeconomic data—per capita gross domestic product (GDP), per capita income—will suffice as a basis for a system of robust fiscal redistribution from the center to the municipalities as well as to self-governing regions.

If the central government wants to keep a high degree of involvement and influence in the decisionmaking of regional and municipality governments, that is, to micromanage through targeted subsidies, then the need for varied and detailed subnational statistical data would be high.

Thus the need for detailed subnational statistical data for the purpose of fiscal redistribution depends on political decisions about the level of municipalities' and regions' autonomy in resource allocation for public services. In any case, even though the need for socioeconomic and other statistical data will be more important and more difficult from the fiscal point of view at the level of individual municipalities, because the central government retains an important role in direct central government, budget transfers to the municipalities and their internal differentiation are high.

The Current State of Subnational Statistics Use by Regional and Local Governments

This section reviews current policymaking practices among regional and local governments, focusing on their use of statistical data at present. It goes on to look at the methods through which statistical data from institutions that collect them get to these users.

Two key factors hinder the use of statistics: (a) the current state of decentralization and limited policy capacity, and (b) the absence of a policy culture. In some cases, the relevant data are missing for small statistical units or are not produced with sufficient frequency. In addition, some potential users of policy-relevant statistical data do not know that available resources exist.

The analysis presented in this section of the study is based on a series of interviews in person and by telephone carried out in March through May 2002 with a sample of representatives from various levels of municipal and regional self-governments in different parts of the country, including the Statistical Office and its regional subsidiaries; regional administrations; departments at the regional state administration offices, which are transferring their powers in various areas of public policymaking to regional and local self-governments; and the National Labor Bureau, and from nongovernmental organizations. We also used data acquired from questionnaires sent to selected representatives of local governments and findings presented at a seminar entitled "The Role of Regional Statistics in the Implementation of Regional and Structural Policy." The seminar was organized by the Statistical Office in cooperation with the French National Institute of Statistics and Economic Studies and the Ministry of Regional Development and took place in the Slovak Republic in May 2002 .

Use of Subnational Statistics by Self-Governments

Until now local and regional governments in the Slovak Republic have used statistical data only to a limited extent. To carry out their duties, these governments primarily use their own performance

data from given areas, data from their own population registers, and data obtained through requests of other data producers. They also provide these data to central statistical systems, mainly to the Statistical Office, in accordance with their legally mandated requirements.

The most frequently used, externally acquired data for public policymaking include data on the demographic structure of regions and towns used by a broad spectrum of users at both levels of self-government; basic economic indicators such as GDP, which are available almost exclusively at the level of regions; data on enterprises; and unemployment data. Units of the regional state administration responsible for specific areas of public services such as health care and education have so far used data provided by sectoral statistical institutions, but only to a limited degree in making public policy, because until now they served mainly as implementers of centrally determined policies.

The Statistical Office is the main source of statistical data. In the area of subnational statistics, the primary outputs are the quarterly printed bulletins published by the office's eight regional administrations. These, however, almost exclusively contain data on regions (Nomenclature of Territorial Units for Statistics or NUTS 3 of the territorial classification) or districts (level NUTS 4), but not for villages and cities (level NUTS 5). A regional database containing all these data for the individual regions in an electronic format is currently under construction and not yet available to users.

At the level of towns and villages, the Statistical Office concentrates most statistical data in the town and municipality statistics and town information system (TMS-TIS) database, which will be described in greater detail later. Self-governments seldom use the data from this database as evidenced by the low number of data requests from self-government users.

A welcome and well-exploited resource for self-governments were the results of the census of population of houses and apartments in 2001, delivered to them in print from the regional administrations of the Statistical Office. Again, the greatest interest of self-governments was in demographic data, which they were able to compare with their own registers. These data make up one of the determinants of subsidies for municipalities from the state budget (participation in tax revenues), as well as the wages of individual mayors.

Data on unemployment make up another fairly frequently used source. They are provided by the regional labor bureaus (public institutions) or the district labor bureaus subordinated to them. Data on unemployment for regions and districts are available in monthly printed reports. These data are not produced automatically for individual cities and villages, but some users were able to obtain them in this breakdown from district labor bureaus.

Obtaining Data from Statistical Sources and Communication between Providers and Users

As the key provider of statistical information, the Statistical Office uses several methods to disseminate data: regular and occasional publications or CD-ROM publications, access to statistical databases, and responses to individual requests on paper or in electronic format. Direct access to databases is not provided. Statistical Office employees will search for the requested data in the database in response to a request by telephone, in writing, or by e-mail.

Of the accessible databases, the most relevant in the area of subnational statistics is the TMS-TIS database, which collects available data at the levels of NUTS 5 and from the regional database.

Access to the TMS-TIS database, which contains some 900 indicators with annual frequency or, if appropriate, lower frequency for all cities and villages in the Slovak Republic for 1996–2001, is offered by the regional administrations of the Statistical Office through a proprietary software system created by Infostat. Users can request outputs in person, by telephone, through the mail, or by fax or e-mail. Their usage patterns, however, show that the TMS-TIS system is used by local governments only occasionally. A detailed breakdown of use at one location showed that in 2001, of the 940 data requests received, less than one-third came from all public sector users, including

state institutions such as schools or hospitals. The remaining requests were from private institutions and individuals. A large portion of potential users among local government representatives simply does not know about the system. The Statistical Office plans to enlarge it further in the near future; connect it with the geographic information system (which allows the depiction of statistical data on a map), which is being created; and present it on the Internet.

Overall, most users described their contacts with regional administrations of the Statistical Office as very good and the access to data in the form of printed reports and in electronic format (on disk) as satisfactory. Every regional administration has a special department devoted to the provision of information. That department is able to provide information on existing sources and provide data from them.

Users also reported good communication with regional and district labor bureaus in terms of data provision. Data were available on request, but again, no comprehensive automated systems for dissemination of relevant data were available to local governments. The situation was better for regional governments, because they had regional labor bureaus to communicate with, and the bureaus covered the same geographic area (unlike cities, which had to communicate with their corresponding district labor bureaus).

Some users voiced complaints about the prohibitive cost of some data. This problem, however, appears among subnational government very infrequently, because they do not have to pay for most data in accordance with the law, and is of greater concern to nongovernmental organizations and other nonstate bodies. A full year's worth of publications from the individual regional administrations of the Statistical Office costs less than Sk 1,500 (approximately US$33).

Absence of Relevant Data and Barriers to Access

Sometimes, subnational government representatives request data that are not being produced at present. Producing the requested data may not be possible, because statistical legislation requires that all Statistical Office surveys be produced economically. Often, data needed for the representatives' work would require an increase in sample sizes and a corresponding increase in cost.

Local representatives at various levels mentioned the issue of availability of municipal-level (NUTS 5) data from the Statistical Office several times during our interviews. The Statistical Office, which by law serves the data needs of the central government, Parliament, and international institutions, serves municipalities as users of a lower order of importance. Therefore most data it compiles are for administrative regions or districts. Districts have no self-governments, and district-level data are thus of limited use to municipal governments. The law also determines most data collection activities that the Statistical Office is required to perform and is geared toward the data needs of the state administration.

Decentralization as the Determining Factor in the Use of Statistical Data

The present state of decentralization is a key factor limiting the use of statistical data by subnational governments for four reasons

First, as subnational governments have had only a limited role delivering the type of public services that require the use of detailed statistics, their needs and experience are limited. In addition, policy was mostly made at the central level (by ministries), so the experience of departments at regional and district state administration offices in these areas has only limited value in anticipating the emerging needs of subnational governments.

Second, the level of policy expertise, which is primarily a function of the size of the unit (larger cities versus smaller cities, towns versus villages) and idiosyncratic factors, varied from one subnational government to another. Local governments in higher unemployment regions

are more competitive in local markets for qualified staff but have fewer candidates with sufficient education.

Third, the policymaking culture and subsequent human resource capacity for evidence-based policymaking is limited. Statisticians at various institutions collecting data made this point repeatedly: few people have the analytical skills required to make use of statistical data. This point was also voiced, however, by a number of individuals on the user side, who felt that they not only needed more data, but also needed to build analytical capacity to exploit these data.

Fourth, another key factor limiting statistical data use in public policymaking is the lack of sufficient frequency data or any data at all from official sources of statistics for their relevant statistical unit (NUTS 5).

Conclusions

Some preliminary conclusions can be drawn from these findings on current practices in policymaking. First, statistics must be adjusted to the process of decentralization and consequent rise in data needs for policymaking. Second, however, user capacity must be enhanced. Policymakers in local and regional governments, who need to acquire skills in evidence-based policymaking, are in many cases aware of this need and open to looking for ways to fill it. Third, communications must be improved. Providers of statistics already make an effort to get their product to users, but awareness of what data are available should be more widespread. Wider use of electronic data dissemination may help rectify the communication issue within the existing capacity.

The Current State of Regional Statistics

One of the issues accompanying the reform of state administration is the rise in the need for regional statistical data. When the public administration offices and authorities were the only executive bodies implementing instructions from the center, the need to use regional statistical data was less acute. At present, the need for regional statistical information arises primarily from the regulations and directives of European Union (EU) bodies, but requirements from the side of users, in particular the new self-government bodies, but also the Ministry of Construction and Regional Development and other institutions, have not yet been defined. Meeting these requirements will be limited by the capacity of the statistics providers.

This section analyzes available data resources for regional statistics and describes certain issues that must be resolved in connection with the ongoing decentralization. Because the system of statistics in the Slovak Republic had been built primarily to serve the needs of the central public administration, however, this section describes the central system of data collection by the Statistical Office and by other central bodies and organizations in their agency. To a great extent, this system also determines the current possibilities for regional statistics.

Regional Statistics

The fact that self-government bodies at the level of regions were established only in December 2001 permeates this entire analysis. The representatives of self-governing regions have recently had to focus on taking over functions, properties, and human and financial resources. In the near future, the self-government bodies will define their statistical requirements. Equally, the central bodies remain uncertain about their new roles as they lose some of their specific management, financial, and personnel powers and change their focus to conceptual tasks. Therefore this section describes the current situation whereby the new reality of self-government bodies is not yet fully reflected at the regional level.

The TMS-TIS Database

The goal of the TMS-TIS database is to provide a broad dataset about the social, economic, and geographic characteristics of municipalities and towns. The database comprises data for every municipality since 1996 in more than 20 topic areas. The database software allows the creation of various tables and overviews of municipalities, towns, districts, and regions as well as user-defined subregions or units based on set criteria. In conjunction with this database software, the PopMap geographic system application enables the presentation of statistical data on a map.

The Regional Database

The TMS-TIS statistical information system is in the process of being extended to include data from the regional database, which monitors other selected indicators up to the level of regions or districts. This regional database, a separate branch of the TMS-TIS application software, uses the system environment and functions of the TMS-TIS application software. Within the application, however, the data of the regional database are maintained separately from the TMS-TIS data.

With respect to the ongoing decentralization of the public administration, we expect that the separate regions will want important information that will, almost certainly, require new surveys. We consider the surveys on the following topics to be the most important for the regions:

- Inactive productive capacities
- Bankruptcy proceedings by sector or industry
- Exports of unprocessed domestic raw materials
- New investment activities by sector or industry as well as their effects on and benefits for job creation, economic efficiency, and volume of taxes
- Industrial park developments
- Support for small and medium enterprises by industry
- Share of agriculture and food processing in foreign trade
- Foreign exchange derived from tourism
- Developments in local tourism (interregional shifts).

The Census of Population, Houses, and Apartments Database

The last census of population, houses, and apartments was carried out in May 2001. The data are currently being processed for entry into a database. The census provides basic data about the following:

- Demographic, social, cultural, and economic characteristics of the population
- Data on the housing stock, that is, types of houses, inhabitants of houses, house ownership, time of construction of houses, number of apartments and floors in apartment building, and utilities (for example, water pipeline, sewage, gas)
- Data regarding the overall housing stock
- Living standards.

Other Surveys Providing Regional Information

Agricultural census 2001. The first valuation of farms in the Slovak Republic has been carried out to a standard satisfactory to the EU. The survey covered practically all farms in the country and gather information on the following:

- Characteristics of farming
- Labor
- Harvested crops
- Vineyards
- Livestock
- Agricultural buildings, machines, and equipment
- Ecological farming
- Winter crops
- Subsidiary activities.

Selective labor force surveys. This type of surveying provides regular information regarding the structure of the labor force and labor market developments. The data obtained are recalculated to the demographic data on the Slovak population as of December 31 of the given year. Data processing and publishing of results are carried out quarterly. Basic data on regions are published quarterly only as total data covering the economic activity of the population and according to sex.

Household and family accounts surveys. The household and family accounts surveys, selective surveys that are regular and continuous, provide information about the level and structure of household incomes and spending, as well as some information about the quality of housing and long-term consumption items. The information is representative up to the level of the regions.

Microcensus. The microcensus is a selective survey done every few years on a sample of about 1 percent of households. The most recent survey was conducted in 1997, and the next survey will take place in 2003.

The survey includes data about the structure of households and the demographic characteristics of household members and provides detailed information about the incomes of separate household members and on household facilities. The goal of this survey is to obtain information to assess the social standing of households. The information is representative up to the level of administrative districts.

Data Sources for Central and Regional Statistics

The Statistical Office organizes and carries out statistical surveys to fulfill its basic mission of providing information about economic conditions and social developments to legislative and executive bodies, state administration bodies and municipalities, the public, and foreign users. In addition, statistical and other data collected, processed, and maintained by ministries and other bodies at various levels of detail are also significant sources of information.

Statistical Information Collection, Maintenance, and Use by State Administration Bodies

Requirements regarding information collection are governed by the Law on State Statistics (law no. 540/2001 Collection of Laws as amended). In terms of this act, the Statistical Office and ministries carry out statistical surveys and comply with the reporting obligation included in the Program of State Statistical Surveys.

The task of the Statistical Office is to coordinate and promote the effectiveness of the process of collection and use of statistical data and, concurrently, to record all statistical surveys, administrative sources of data, and other databases created by ministries, other state administration bodies, and institutions. Lists of all statistical surveys and information related to statistical data are available on the Statistical Office's Web site (http://www.statistics.sk/) in the section on statistical surveys. Table 5.6 summarizes surveys undertaken by topic, and table 5.7 summarizes surveys by agencies.

Evaluation of Statistical Information Collection, Maintenance, and Use by State Administrative Bodies

The number of surveys is too large and represents a considerable burden on individual reporting units; however, central bodies oppose reducing the number of surveys, citing the following as reasons:

- The need to know the status of organizations established and supervised by the respective central body of a particular sector
- Unsatisfactory adherence to deadlines for delivering survey results by the Statistical Office
- Different system of reporting units for identical industrial classification codes
- Uselessness of some results because they do not meet the criteria of the required form
- Problem of replacing existing surveys with other surveys or with other work, an issue that involves modifying job descriptions or the organization of work at some offices
- Individual sectors' need to acquire data about specific companies to be able to manage their investment policy and their policy for providing subsidies.

Statistical surveys outside the framework of the Program of State Statistical Surveys pose a special problem. The collection of information is, in nearly all sectors, justified by a need to know

Table 5.6 *State Statistical Surveys Implemented by the Statistical Office, by Sector, 2000*

	Number of surveys	
Sector	*As part of the PSSS*	*Outside the PSSS*
Organization statistics	4	0
Banking and insurance	5	0
Population	5	2
Tourism	3	0
Environment	9	0
Investment	1	0
Research and development	2	0
Labor and payroll	7	0
Prices	16	0
Agriculture and fisheries	11	0
Forestry	2	0
Water management	5	0
Industry	1	0
Construction industry	1	0
Selected market services	1	0
Retail, restaurants, and accommodation services	1	0
Transportation	7	0
Illness and injuries	1	0
Social services	8	0
Fuel and energy management	6	0
Town and municipal statistics	1	0
Post and telecommunication	2	0
Nonmarket services	3	0
Universal surveys (9 sectors)	5	0
Total	107	2

PSSS Program of State Statistical Surveys.
Source: Data from http://www.statistics.sk.

Table 5.7 *Statistical Surveys Performed by Central State Administration Bodies, 2000*

Central state administration body	*Number of surveys*	
	As part of the PSSS	*Outside the PSSS*
Statistical Office	107	2
Ministry of Foreign Affairs	0	0
Ministry of Economy	4	4
Ministry of Interior	10	0
Ministry of Finance	1	6
Ministry of Culture	15	0
Ministry for Administration and Privatization of National Property	0	0
Ministry of Health	65	0
Ministry of Education	42	0
Ministry of Justice	9	3
Ministry of Labor, Social Affairs, and Family	16	1
Ministry of Environment	3	3
Ministry of Agriculture	32	5
Ministry of Transportation, Post, and Telecommunications	21	3
Ministry of Construction and Regional Development	2	0
Antimonopoly Office	0	0
Bureau of Geodesy, Cartography, and Cadastre	3	5
Office for Standardization, Metrology, and Testing	0	0
Administration of State Material Reserves	3	0
Nuclear Safety Office	0	0
Public Procurement Office	0	0
Office of the Government	1	0
Total	334	32

PSSS Program of State Statistical Surveys.
Source: Data from http://www.statistics.sk.

the situation within the sector in relation to the tasks resulting from law no. 128/2002 on Competencies. No criteria or recommendations have been established to evaluate the need for such surveys, in particular, from the viewpoint of the mission of individual central state administration bodies.

Conclusions

Many data sources for regional and local statistics are currently available, but the mechanisms to secure users' access to such information must be overhauled.

Several important databases remain unfinished with regard to their content, form of presentation, and results provided. Self-government bodies are soon likely to require specific types of information in connection to the decentralization process, but neither regional nor central bodies are certain about their newly assigned tasks. Finding solutions to many shortcomings simply requires time so that users and providers of information may adapt to the new framework.

Obstacles to the Collection and Use of Regional Statistics and Possible Solutions

This section summarizes findings about obstacles faced during the collection and use of statistical information on regional and local self-governments. It is based on analyses presented in the

previous two sections and complements them with the information on personnel and financial capacities for collecting and processing statistical information.

Obstacles on the Supply Side

With respect to the supply of statistical information, three major types of problems may exist:

- Insufficient amounts of data may be produced or the data produced may not be of high enough quality.
- Data for which there is no demand are produced.
- Access of users to the data is insufficient.

The Statistical Office, as the supreme national statistical body, is well aware of these problems and is working to solve them.

Funding for the Statistical Office is assigned from the state budget for the purposes of performing tasks set out in the Law on State Statistics (law no. 540/2001 Collection of Laws). This act establishes "conditions for the acquisition of statistical information, which is necessary for the assessment of socioeconomic development, status, and competence of bodies performing state statistics, tasks of public authority bodies in the field of state statistics, rights and duties of reporting units, protection of classified statistical information against misuse, provision and publication of statistical data, provision of comparability of the statistical information and meeting of obligations resulting from international treaties in the field of state statistics."

The original expenditure budget for this activity (approved in the amount of approximately Sk 308 million) was modified during the year by the Ministry of Finance and increased to Sk 531 million so that the Statistical Office could carry out the 2001 census of population, houses, and apartments and the census of farms. Only Sk 530 million was actually spent. Although the expenditure budget was in the hundreds of millions of koruny, revenues of the chapter approved within the budget in the amount of Sk 6 million actually reached Sk 10.8 million with the addition of revenues from sales of statistical information and publications, rental of buildings and premises, and penalties imposed for not meeting reporting obligations.

The Public Opinion Research Institute is part of the Statistical Office. Its task is to provide information on socioeconomic issues based on nationwide public opinion surveys. Twenty-one research tasks were implemented in 2001, focusing on several aspects of life, such as a consumer barometer, the tourist industry, the informal sector, and the behavior of police officers. Cooperation with foreign institutions included an agreement with the Directorate-General of the European Commission for Economic and Financial Affairs, which is one of the users of survey results.

Excluding employees at its headquarters, eight regional administrations contributed to the Statistical Office's work in 2001. These offices were located in Bratislava, Trnava, Nitra, Trenčín, Žilina, Banská Bystrica, Košice, and Prešov, and had the status of budgetary organizations with independent legal capacity. As of December 31, 2001, 332 employees (235 women and 97 men) worked at the Statistical Office's headquarters. These numbers include 10 interns who were employed as part of a program to train university graduates for future positions within central state administration bodies. Of the total number of employees, 74 percent were university graduates, 21 percent had graduated from secondary school, 4 percent had a secondary education, and 1 percent had only a primary school education.

Given this financial and personnel background, the Statistical Office has been able to perform its tasks. However, certain problems, in particular, methodological problems and issues pertaining to communication with users, could probably be resolved more quickly with additional funding. Certain problems relating to insufficient interconnection of databases from different administrative sources were also an outcome of insufficient funds to buy new technical equipment.

On the basis of available information, however, assessing whether the current personnel and financial resources will be sufficient in the future is not possible, assuming that the demands for the supply of statistical information by self-government bodies will increase as expected. More comprehensive analysis of the future requirements of the Statistical Office and other providers of statistical information will be possible only after the users of such information are able to define their actual information requirements more precisely.

Obstacles on the Demand Side

The demand side faces the following problems:

- Insufficient use of information available because of a lack of awareness about its existence. This problem is due to insufficient communication between users and providers of statistical information.
- Lack of capacity to define needs for statistical information. This is primarily because of the ongoing decentralization process, but probably also partly because of the lack of capacity for policymaking.

Nevertheless, despite the problems much high-quality statistical data are being produced at both the national and regional levels. The problems have to do with the inaccessibility of such data and the level of use of the primary data and survey results.

The integration of the Slovak Republic into the EU and cooperation with Eurostat related to the accession process has both positive and negative effects. A positive effect is the transfer of know-how in connection with the standardization of many surveys so that they can be subsequently used by Eurostat. As the EU member countries have much more long-term and extensive experience with the use of subnational statistics, the Slovak Republic receives important know-how in this area. The negative influence stems from the fact that Eurostat is the single most powerful and active "client" of the Statistical Office, and its requirements thus overshadow the often poorly and inaccurately defined or not forcefully voiced interests of domestic clients.

Preliminary Proposals

To address the issues outlined earlier, steps need to be taken in several areas. This section outlines preliminary proposals for measures in the areas of the Statistical Office's financial and personnel capacities, methodological and technical problems, and the problems of users of statistics.

Financial and Personnel Capacities

As already noted, when analyzing the Statistical Office's personnel situation, determining whether and to what extent its capacity will have to be increased is not currently possible. Of course, the same problem also relates to other providers of information. If the increasing requirements by users indicate that capacity has to be increased, however, funding will likely come from several sources.

The first option is to increase funds from state budget sources for the performance of surveys. The majority of these funds would most likely go to the Statistical Office, which should coordinate the performance of surveys or assign such performance to other institutions. However, this solution runs up against the overall budgetary limits and the current pressure to limit spending on statistics.

Second, certain reserves will likely be acquired by streamlining the system of statistical surveys. The Statistical Office is currently taking steps to this end. It took on the role of coordinator

for making the process of acquisition and use of statistical data more efficient. Its task is to keep records about all statistical surveys, administrative data sources, and other databases that were created by individual ministries, other bodies of the state administration, and institutions. Each recordkeeping unit will be characterized in detail, including its forecasted expenditures for the performance of statistical surveys. The recordkeeping could theoretically make possible an audit of the use of expended funds for statistical surveys. In practice, this process is more complex and requires more time and cooperation between experts working in various fields. Within the framework of this study, providing an assessment of the efficient use of funds for the many statistical surveys was not possible. Early indications are, however, that the Statistical Office has encountered difficulties in cooperating even with other central organs to create the inventory of administrative data sources.

Other likely sources of funding are international governmental and nongovernmental organizations. A certain amount of such funds can be expected within the framework of the accession process to the EU. As in other fields, however, the acquisition of such funds requires an active approach and a clear definition of requirements and goals. Providers of statistical information, especially the Statistical Office, as well as users of information in self-government bodies, may all apply for such assistance. Apart from the EU, several other international institutions are also likely sources.

Finally, with the increasing requirements the pressure on self-government bodies to contribute financially to the performance of statistical surveys proposed by them will intensify. Taking into account the current financial situation of the majority of self-government bodies, expecting them to pay large amounts for such surveys or analyses is unrealistic, but as is the case in other countries, self-governing bodies will be forced to pay at least part of the costs for surveys directly.

Technical and Methodological Problems

Statistical data collected by the Statistical Office and other central state administration bodies currently dominate the collection and processing of statistical information. As emphasized earlier, most surveys enable disaggregation at least to the regional level and, therefore, may be at least partially used for the formulation of public policy at the regional or local level. Eight recommendations for the overall improvement of the collection and processing of statistical information follow.

First, with regard to the providers of statistical information, expanding the amount of data collected at the NUTS 5 level is of primary importance, because only this level is relevant from the viewpoint of self-government bodies and regional politics within the framework of the EU accession process.

Second, state administration expenditures for conducting statistical surveys, processing data, and keeping records must be more transparent. Solutions must be found to the problems of survey contents and the methodological, analytical, and technical character of the surveys. Until these problems are solved, determining the exact expenditures for individually performed surveys is difficult. Nevertheless, creating a transparent system for relatively accurate assessment of expenditures for individual statistical surveys would be practical. Such a system might enable the accurate assessment and streamlining of total expenditures, thereby freeing up resources to meet high-priority goals, including strengthening regional statistics.

Third, the procedures for justifying the inclusion of state statistical surveys in the Program of State Statistical Surveys for the respective calendar year must be tightened. Determining criteria to justify state statistical surveys, as well as assessing individual proposals, should be done by experts from several fields. The criteria should be available and known to public administration organs at all levels. This tightening of the justification procedure would reduce the possibility of misuse of funds available for statistical surveys.

Fourth, direct communication between the Statistical Office and those institutions that create and maintain databases must be intensified, thereby intensifying, in turn, the use of data coming from administrative sources for statistical purposes. Direct communication should primarily focus on modifying administrative data into a form that would be accessible to larger numbers of users. This modification requires the preparation of methodological calculations by the Statistical Office or by other implementing agencies, but it would significantly increase the availability and use of such sources for the entire public administration.

Fifth, harmonization of the database of registers must be continued. Harmonization dictates that public administration bodies keep records about citizens, legal entities, and entrepreneurs (individuals) pursuant to special legal regulations. The use of registers that are not unified and up-to-date and are methodologically incompatible typifies frequent problems with the use of statistics coming from different sources. Furthermore, data (particularly data in electronic form) kept in information databases and registers should be made accessible to public administration bodies for the purpose of mutual exchange of data and updates of individual databases in order to reduce the administrative burden on economic entities and individuals.

Sixth, to secure high-quality outputs from individual surveys, high-quality registers of organizations must be created, because the accuracy and timeliness of data are preconditions for the return rate of reporting and, subsequently, the quality of acquired data.

Seventh, the unified methodological approaches to the performance of surveys must be defined from the design of their contents to their actual implementation. Although this recommendation is of primary importance, it should not lead to the theoretical and practical absurdity of using a single method for all surveys.

This proposed unification could also be useful with respect to defining the system for data processing. If the system for data processing is known and, even more important, unified, users of such data will enjoy simple and rational access. This convenience will free users to seek solutions to content problems rather than being mired in technical problems. The key obstacle is the insufficient compatibility of the software and hardware platforms. Besides more funding, the solution to this problem requires mutual coordination between database administrators.

Eighth, more complex statistical methods, which offer easily interpretable characteristics of monitored phenomena, should be used. This enhancement, which will provide users with better interpretation, thereby allowing them to make better use of available data, is one possible area for more intensive cooperation between providers of statistical information, users, and other experts.

The Problems of Users

The recommendations presented here are based on the current state of use of subnational statistics by self-governments.

First, and most important, mechanisms for communication must be created between providers of statistical information and its users among self-governing bodies. Several alternatives for the acquisition of information about the nature of these requirements are possible, for example, collecting data about the requirements through associations of self-governments or organizing periodic events attended by users and providers that would be dedicated to the collection of data about their current requirements.

Second, communication by the providers of the statistical information must be strengthened. In particular, the Statistical Office must communicate more effectively which individual statistical indicators are available, for which units they are available, and what frequency they represent as well as how users can acquire this information. One alternative is to collect such data in a clear format and periodically publish them in print or via the Internet.

Third, the accessibility of statistical information must be improved by completing and extending existing databases (regional database and the TMS-TIS database) by offering more attractive

outputs and outputs of higher quality (for example, within the framework of upgrading the geographic information system), and by making them available via the Internet.

Fourth, another way in which the existing expert capacity of the Statistical Office and other external capacities may be used is to help self-governments build their analytical capacity to use statistical data to make public policy. Representatives of self-governments are open to attending training courses provided by experts in individual fields. Such training courses could take various forms, and universities could play a role by offering more extensive options for higher education in the field of public policy.

Conclusions

The results of this study were presented by the authors at the May 27, 2002, workshop organized by the Union of Cities attended by representatives of various stakeholder groups, including officials of the Statistical Office, ministries, other central organs, and regional and local governments.

The subsequent discussion yielded a number of comments and corrections, which are reflected in this final version. The discussion also highlighted several problems outlined in the study. Representatives of users of statistics voiced their views on data availability, which were challenged by Statistical Office representatives. This disagreement illustrated that information flows between statistics providers and users have been insufficient. Representatives of regional and local governments also specified some further areas in which they thought the available statistical data did not meet their needs.

The participants agreed with most of the recommendations contained in the study and welcomed the project's aim of improving subnational statistics. The next step in the process is the preparation of an action plan. This task will involve close cooperation between the Slovak Governance Institute, the Statistical Office, Infostat, the Union of Cities of the Slovak Republic, and other stakeholders involved in the project.

At this point the project has already contributed to improved communication between the providers of statistics and new users from the ranks of representatives of subnational governments, whose need for statistical data is increasing with the acquisition of new activities during the process of decentralization. It has also drawn attention to problems in this area and included some stakeholders in this process.

Further measures, detailed in the action plan, could contribute, at least in a small way, to making the process of decentralization easier to implement and, ultimately, to improving the quality, efficiency, transparency, and accessibility of public services provided by subnational governments by helping them meet their needs for detailed social and economic data, and thereby improving their capacity for making good public policy.

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6

Slovenia

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This paper summarises the main findings of the *Subnational Statistics Needs Assessment Report (NAR)* for Slovenia. The study was carried out within the international project Subnational Statistical Capacity Building (SSCB). In the framework of the project, the local partner for Slovenia is Statistical Institute at the University of Ljubljana's Faculty of Economics (SIEF). SIEF coordinates the activities of the Slovene research group consisting of researchers from the University of Ljubljana's Faculty of Economics, the Institute for Macroeconomic Analysis and Development, the Statistical Office of the Republic of Slovenia and the Ministry of Finance.

Following the rationale for the project, the purpose of the *NAR* was to assess the current situation of subnational statistics and its availability as well as the data needs of subnational governments. Because the only types of subnational government in Slovenia are municipalities, the study concentrated on the data issues related to the level of municipalities.

Key Facts and Figures

Slovenia lies at the heart of Europe where the Alps and the Mediterranean meet the Pannonian plains and the Karst region. The country borders Austria, Croatia, Hungary, and Italy and has a population of a little under 2 million people and an area of just over 20,000 square kilometers.

Formerly a constituent republic of Yugoslavia, Slovenia became an independent state in 1991. A decade later it is an established, democratic, stable, and successful Central European country endeavoring to preserve its territorial integrity as well as natural and cultural heritage. Table 6.1 gives an overview of how Slovenia compares with the European Union (EU).

Slovenia is at the top of the list of candidate countries preparing for EU accession. Its macroeconomic and social indicators (see table 6.1) are approaching the EU average (their values are close to those of member countries Greece, Portugal, and Spain). Inflation remains one of Slovenia's biggest problems. Others include the pronounced aging of the population and the threat of future depopulation.[1]

Current Status and Extent of Fiscal Decentralization and the Importance of Subnational Statistics

In the years since gaining independence, Slovenia has experienced remarkable political, economic, and social change. The fiscal landscape has also changed. From a very decentralized (and nontransparent) fiscal system characteristic of the socialist self-managed approach, Slovenia moved to a centralized system quite early in the transition period, that is, in the early 1990s. Although this swing of the fiscal pendulum was perhaps excessive, it was to a certain extent necessitated by

1. Further information on Slovenia (constitution, government, institutions, and related topics) is available online at http://www.sigov.si. For a more detailed statistical overview see http://www.sigov.si/zrs/.

Table 6.1 *Key Social and Economic Indicators, Slovenia and the EU, 2000*

Indicator	*Slovenia*	*EU*
Population on January 1 (thousands)	1,988	376,455
Area (square kilometers)	20,273	3,191,000
GDP per head, purchasing power parity (€)	16,100	22,530
Population under age 15 (%)	16.1	16.9
Fertility rate[a] (%)	1.21	1.45
Male life expectancy at birth (years)	71.9	74.9
Female life expectancy at birth (years)	79.1	81.2
Unemployment rate (%)	6.9	8.2
Employment (%)		
Agriculture	9.6	4.3
Industry and construction	37.7	28.9
Services	52.7	66.8
Average GDP growth rate at constant prices 1995–99 (%)	4.2	2.4
Annual rate of inflation (%)	8.9	2.1
General government budget deficit (–) or surplus (+) as a percentage of GDP[a]	–1.3	–0.7
External debt as a percentage of GDP[a]	24.2	—

— Not available.
GDP Gross domestic product.
a. In 1999.
Sources: Eurostat (2001); Statistical Office of the Republic of Slovenia (2002).

the desire of the central government to maintain a tight fiscal grip to assure macroeconomic stabilization. The other instrument for achieving stabilization was monetary policy, which was (and still is) carried out by the Bank of Slovenia. The central government has not shown any desire to loosen its fiscal grip, as can be observed from the fairly low, and stable, share of local finances in general government finances. Since 1992, the fiscal expenditures of local authorities (municipalities) have represented between 11 and 12 percent of general government expenditures. In addition, a clear sign of the reticence of the central government to proceed with fiscal decentralization is the complete stalemate in the legal preparations for the establishment of an intermediate level of government in-between the central government and local government. The root cause for this position of the central government is the fear that a new level of government would seriously jeopardize Slovenia's fiscal position.

Regions do exist in Slovenia, but they are purely statistical regions and not entities with any fiscal authority. Although the heated discussion on the formation of fiscal regions or provinces has abated somewhat, it will no doubt resurface, because entry into the EU is approaching.

Based on the 1994 law on the procedure for establishing new municipalities, 147 municipalities were formed. A series of appeals to the Constitutional Court followed, and in 1997 a new round commenced, that is, the procedure for the establishment of new municipalities and the enforcement of some modifications. In July 1998, following amendments to the 1994 law, an additional 45 municipalities were established, bringing the total number to 192, of which 11 are urban municipalities. Even though numerous new proposals were made for a third wave of expansion in early 2002, only one new municipality was accepted. At present, therefore, Slovenia has 193 municipalities; however, the figure of 192 municipalities is used in the subsequent analysis, because the change from 192 to 193 occurred after the joint project on subnational statistical capacity building had been set in motion.

Formally, the rationale for this new "tight" policy was that virtually all the newly proposed municipalities did not meet the requirements set by law, particularly the minimum population condition. However, most of the municipalities formed in the second wave did not meet the necessary requirements either, and a full 96 of the 192 established municipalities fall short of the minimum population requirement (Vlaj 2001, p. 202). What did change in 2002 was the expansionary mood of Parliament, which became strongly opposed to the formation of new municipalities.

According to the law on local self-government, municipalities are defined as basic self-managed local communities. An applicant must meet certain minimum requirements to become a municipality. It must have certain basic amenities, such as a post office, a health service, an elementary school, a bank branch, and a minimum population of 5,000. Of course, the conditions for the establishment of the so-called urban municipalities are more stringent: a population of more than 20,000 and a workforce of more than 15,000 are required, as well as a fairly developed level of services in health, education, the media, telecommunication, and so forth.

The Bodies, Functions, and Financing of Municipalities

The organization of local government is rather simple and transparent. Typically, three municipal bodies constitute Slovene municipalities: a municipal council, a supervisory committee, and a mayor. Municipal councils are the highest bodies for decisions on all matters within the framework of the rights and duties of municipalities. They can have from 7 to 45 members, depending on the size of the municipality. The supervisory committee is the highest body of supervision on matters of public expenditure within the municipality. The mayor represents the municipality, convenes the municipal council, and chairs the sessions of the municipal council, but does not have voting rights.

The functions of municipalities can be grouped into the following:

- Municipal administration
- Municipal public services, such as elementary schooling, social assistance, child care, health care, culture, sports activities, research
- Subsidies and other current transfers for municipal services, such as housing provision, local road maintenance, urban and spatial planning, environmental protection, and so forth
- Fire prevention and dealing with natural disasters.

The delineation is fairly clear between the responsibility of the central government and local government in areas in which both are financially involved, namely:

- *Elementary schooling.* The local government covers the following items in elementary schooling provision: transport of pupils to and from schools, fixed costs (electricity, water, heating), costs for maintenance, and new investments. The central government provides teachers' salaries and nutrition for poor pupils, and it cofinances various extracurricular activities.
- *Social assistance.* The most important undertaking by the municipality is copayment for long-term care (retirement homes) for those elderly who do not have sufficient resources of their own. Also financed by the municipality are lump-sum cash disbursements to the poor.
- *Child care.* The municipality sets the price for day care services. Parents are required to pay most of the costs, although the municipality must cover at least 20 percent, and for parents with low incomes the municipality contributes even more.
- *Health care.* Municipalities are obliged to pay health insurance for those who do not have sufficient means of their own. The recipients of this benefit are mostly unemployed people

for whom the Employment Office discontinued payment of unemployment benefits and unemployment assistance, or young unemployed people who are not eligible for unemployment benefits and unemployment assistance. For cases in which the municipalities have assumed founding responsibilities for primary health care centers and pharmacies, municipalities also assume the financial burden, although employees' salaries are paid by the Institute for Health Insurance. Should the municipality desire an improved quality of health care service, such as additional medical staff over and above the standard set by the Institute for Health Insurance, this enhancement would have to be covered by the local budget.

- *Culture.* Funding for culture is mostly targeted at those institutions for which the municipality assumed founding responsibilities, such as theaters, museums, galleries, music schools, and libraries. Also funding for other nonbinding requirements, such as cofinancing of cultural societies, amateur theaters, choirs, and cultural events, is quite common.
- *Housing.* Housing provision by the municipality is limited to providing social housing, that is, for those families that do not have sufficient resources of their own. The Slovene housing legislation also introduced the term "nonprofit rentals"; in principle these rentals are earmarked for families of modest incomes, who are nevertheless able to pay their rent.
- *Infrastructure.* Local road maintenance and construction is in the domain of local municipalities, although in some instances the local population can contribute additional resources, provided that this decision has been reached through a local referendum.

With regard to investments, the role of the central government is less clearly defined. Cost sharing here depends not only on the fiscal capacity of the municipality, but is also the result of negotiations between the central government and the relevant municipality, relying on special interests at the national level for such an investment (that is, if the proposed municipal investment fits into an official national development plan or program for new schools, kindergartens, primary health centers, libraries, and the like). Municipalities apply for funds and their proposals are "sifted" through the corresponding ministries.

Maintenance costs, even in cases of larger investment repairs, are covered, as a rule, by the local budget. This coverage applies to elementary schools, child care centers, primary health care centers, sport facilities, local roads, and so forth.

Municipalities finance their expenditures in two ways: through their own resources and through grants from the central government's resources. Municipalities' own revenues include annual real estate taxes; compensation for built land; income from rent; income (profit) from public enterprises; taxes on property transactions; inheritance and gift taxes; taxes on lottery payments and other games; communal, tourism, and environmental levies; levy for changing the use of land; and 35 percent of the personal income tax. These taxes and levies are quite heterogeneous. Although for most taxes and levies the central government sets the permitted rates and taxable base, in some cases the municipality has complete freedom in choosing its taxable base and tax rates. This freedom is particularly true for a levy euphemistically labeled "compensation for built land," which is in effect a property tax. The structure of revenues and grants of local governments is presented in table 6.2.

The projection for 2001 in table 6.2 indicates that taxes on income, profits, and capital gains would represent almost 43 percent of all revenues and grants of local governments. In that same year grants, which are almost exclusively transfers from the central government, would represent almost 23 percent of all revenues and grants. Taxes on property are ranked third in importance and would represent almost 12 percent of total revenues and grants. They include not only real estate taxes and taxes on property transactions, but also compensation for built land, which is by far the most important of the three.

Table 6.2 *Revenues and Grants of Local Governments, 1992–2001*

(year ending December 31, SIT billions)

Revenues and grants		*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*[a]
I	Total revenue and grants (II + VII)	51.4	72.1	93.2	108.3	128.3	147.3	167.2	189.8	215.0	236.7
II	Total revenue (III + VI)	39.2	57.3	72.6	80.7	102.9	115.3	131.0	145.9	164.1	182.7
III	Current revenue (IV + V)	37.4	55.8	71.1	78.9	101.2	111.6	127.4	140.0	155.2	172.9
IV	Tax revenue (1–7)	31.3	45.1	57.0	62.4	76.1	85.0	96.7	113.8	126.0	140.1
1	Tax on income, profits, capital gains	27.9	40.7	50.0	46.4	55.4	58.2	64.0	81.0	90.9	101.7
4	Taxes on property	1.9	2.8	2.8	12.3	14.6	19.6	23.4	24.5	25.5	27.9
5	Domestic taxes on goods and services	0.9	1.6	4.2	3.3	5.8	7.0	8.9	8.2	9.6	10.5
3,6,7	Other taxes	0.6	. . .	. . .	0.4	0.2	0.2	0.3	. . .	. . .	. . .
V	Nontax revenue (8–12)	6.1	10.7	14.0	16.5	25.1	26.6	30.7	26.2	29.2	32.8
8	Entrepreneurial and property income	1.4	1.5	2.1	2.3	4.3	5.4	6.7	9.9	11.8	13.7
9,10	Fees, sales, and fines	2.5	5.4	5.0	2.9	3.4	3.7	4.1	1.9	2.7	3.4
12	Other nontax revenue	2.2	3.8	6.9	11.2	17.4	17.5	20.0	14.4	14.7	15.7
VI	Capital revenue	1.8	1.5	1.5	1.8	1.7	3.8	3.6	5.9	8.9	9.8
VII	Grants	12.2	14.8	20.6	27.7	25.4	32.0	36.2	43.9	51.1	53.9

. . . Figure is a zero or less than half of a significant digit.
a. Forecasted or projected data.
Source: IMF (2001).

The second way that municipalities finance their expenditures is by applying for a grant from the central government. Grants include funds for the so-called financial equalization and are termed either general grants or specific grants (the previously mentioned funds for various investments in objects and infrastructure at the local level). The aim of the financial equalization is to provide sufficient resources for those municipalities whose fiscal capacity is weak.

The procedure for computing the required funds to be obtained from the central government budget is as follows:

- A nationwide level of local public expenditure per capita, that is, expenditure that is to be financed through local budgets, is set in the annual law on the implementation of the government budget. This figure was first computed in 1998 simply by taking the total of all expenditures for which municipalities were responsible and dividing it by the number of inhabitants of Slovenia.
- Following this initial exercise, new annual values are updated by the cost of living index and an agreed upon escalation.
- On the basis of this nationwide level of local expenditures per capita, a level of appropriate local public expenditure for an individual municipality is computed by correcting the appropriate nationwide expenditure per capita with the ratio of the municipal surface area, the length of local roads, the number of inhabitants under 15 years of age, and the number of inhabitants over 65 years of age against the national average. The amount of appropriate expenditure for an individual municipality (marked with subscript *i*) is thus calculated as follows:

$$PP_i = (0.70 + 0.05\, C_i + 0.05\, P_i + 0.16\, M_i + 0.04\, S_i) \cdot ZP \cdot O_i,$$

  where

  PP_i is the appropriate level of funding to finance local requirements in an individual municipality;

  C_i is the ratio between the length of local (municipal) roads per capita in the individual municipality and the length of local (municipal) roads per capita in the country as a whole;

  P_i is the ratio between the surface area of the individual municipality per capita and the surface area of the state as a whole per capita;

  M_i is the ratio between the proportion of people under 15 years of age within the overall population of the municipality and the average such proportion for all municipalities in the country as of January 1 in the year in which the level of appropriate expenditure is determined for the following year;

  S_i is the ratio between the proportion of people over 65 years of age within the overall population of the individual municipality and the average such proportion for all municipalities in the country as of January 1 in the year in which the level of appropriate expenditure is determined for the following year;

  ZP is the appropriate expenditure per capita;

  O_i is the number of people with permanent residence in an individual municipality as of January 1 in the year in which the level of appropriate expenditure is determined for the following year according to the data from the central population register.
- Having arrived at the computed value of the level of appropriate local public expenditure for a given municipality, the amount of necessary transfers from the central government budget is computed as the difference between appropriate local public expenditure and own revenues of the municipality. In practice, to avoid inducing strong disincentives for own fiscal capacity of the municipalities, some revenues are not taken into account as own sources of revenue. These revenues include income from rents and other municipal property, interest income (from the municipalities' bank deposits), income from the sale and

purchase of stocks and bonds, income from contributions for communal infrastructure, and income from self-imposed contributions. (These contributions are based on local referendums, where the local population votes for the imposition of temporary contributions for financing certain new investments, such as schools, roads, and child care centers.) Also, to prevent manipulation of the system, municipalities that do not have the levy "compensation for built land" have their equalization grant reduced by the amount of a "notional" compensation for built land. This measure reduced the number of municipalities that do not have this levy.

The restrictions on long-term debt are severe. Thus municipalities can incur debt, subject to the approval of the minister of finance. The total amount of their debt cannot exceed 10 percent of own annual municipal revenues, and the repayment of debt, including interest payments, must not exceed 5 percent of own municipal revenues in the current year. The 10 percent cap does not apply to debt incurred for housing construction, water supply, and wastewater and sewage processing, in which case total debt repayment must not exceed 3 percent of annual own revenues. Thus municipalities with debt amounting to some 20 percent of own revenues are not uncommon.

Statistical Analysis

The proliferation of municipal governments, which in Slovenia occurred in the early 1990s, resulted in heterogeneous municipalities, not only with regard to size, but also with regard to their fiscal capacity. Urban municipalities are typically large, with a strong fiscal capacity, whereas other municipalities are small, and mostly with a weak fiscal capacity.

The heterogeneity of Slovene municipalities was statistically analyzed and confirmed using size, development level, and economic power criteria. Selected economic, demographic, and social variables were used in cluster analysis to identify four distinct groups of municipalities: most developed, developed, less developed, and underdeveloped.

The list of variables included in the analysis consisted of the following indicators:

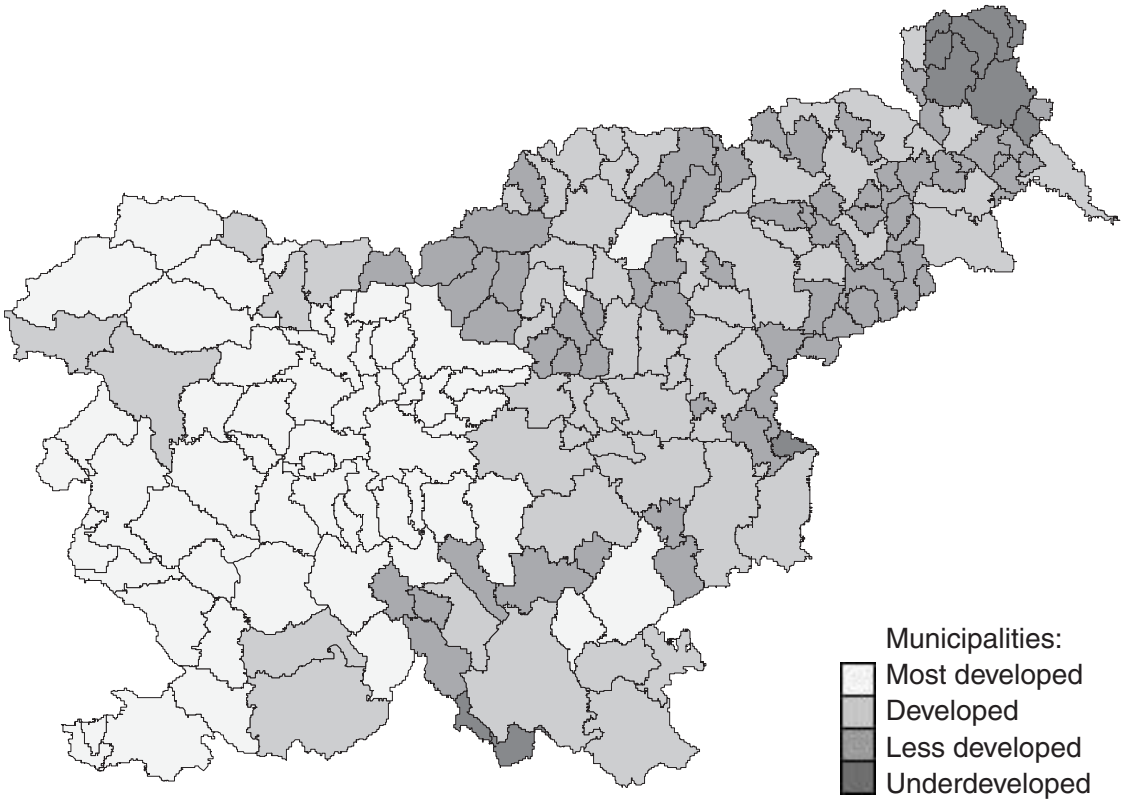
- Aging index: the ratio of the population 65 years and older and the population aged 0–14
- Index of population growth: change in population over the period 1991–2001
- Index of daily commuting: the ratio between the number of jobs and the number of employed residents in a given municipality
- Income tax base per capita
- Unemployment rate
- Number of university students per 1,000 inhabitants
- Number of cars per 100 inhabitants.

The variables used in the analysis were standardized. The standard procedure for cluster analysis was used. First, clusters were identified by Ward's hierarchical clustering method. To improve the results of hierarchical method, the leaders method was then applied. The results are shown in figure 6.1.

The picture seems fairly clear. Ljubljana, together with adjacent municipalities and the western part of Slovenia, forms a group of the most developed municipalities. Municipalities in the eastern part of Slovenia are developed or less developed. Most concerns are caused by the situation in the northeast where the group of underdeveloped municipalities is clustered. Thus the developed west can be clearly discerned from the undeveloped east.

The differences among identified groups of municipalities are also reflected by the mean values of selected variables for these groups (see table 6.3).

Figure 6.1 *Four Clusters of Slovene Municipalities*



Source: SORS, Demographic Statistics On-Line, http://www.sigov.si/zrs/slo/rr762-2001/17.pdf.

The importance of classification variables was also statistically tested using the Bonferoni test. The most important classification variable is the income tax base per capita, followed by the index of population growth. In general, the index of population growth is higher for more developed municipalities. The aging index expresses the demographic differences among the underdeveloped municipalities and the other three groups most dramatically.

As already mentioned, the index of daily commuting measures the ratio between the number of jobs and the number of employed residents in a given municipality. With regard to this indicator, significant differences exist between the most developed municipalities, which have plenty of employment opportunities, and the other three groups. Employment opportunities for the population of a given municipality are reflected in the rate of registered unemployment, which is significantly lower in the most developed municipalities.

These finding lead to several important implications for decisionmaking processes at the municipal level, namely:

- The differences among variables indicate different economic, social, and demographic situations among the groups of municipalities, which suggest a need for different development strategies, and consequently for different policy priorities, both at the central government level and the local government level. The focus on different kinds of issues implies a need for different datasets.
- As the income tax base per capita is defined as the most important classification variable, and given that income taxes are among the most important sources of municipalities' revenues, clearly the differences in the financial capacities of individual municipalities are

Table 6.3 *Mean Values of Selected Variables by Clusters*

	Clusters of municipalities				
Variable	*Most developed*	*Developed*	*Less developed*	*Under-developed*	*Slovenia*
Aging index (December 31, 1999)	82.9	84.0	83.5	159.6	87.8
Income tax base per capita (SIT thousands)	980,159.0	795,675.0	643,138.0	542,758.0	784,647.0
Registered unemployment rate (%)	6.8	13.5	14.3	15.9	11.9
Percentage of students	36.4	38.0	17.1	13.1	28.8
Number of cars per 100 inhabitants	61.0	51.0	46.0	41.0	52.0
Index of daily commuting	73.2	95.2	44.7	49.4	68.2
Index of the population growth (1991–2001)	106.8	99.8	100.0	90.2	101.5

Source: SSCB (2002).

huge. These differences are balanced through the financial equalization system. The allocation of funds through this system is based on the difference between the average annual level of public expenditure per capita nationwide and the calculated amount of "appropriate expenditure" for a given municipality. From the technical point of view, the system is simple, transparent, and does not demand any additional data. The system for allocating investment funds is less transparent.

- Of the 192 Slovene municipalities, 50 percent have fewer than 5,000 inhabitants, which affects human resource availability with regard to specialized knowledge, for instance, capacity for statistical work.

Current Practices and Extent of Use of Statistical Data by Subnational Governments

After assessing data needs from the viewpoint of the local government system and the extent of fiscal decentralization in Slovenia, this section focuses on current practices in relation to informed decisionmaking in the area of social welfare at both the central and local government levels. The ministries are decisionmakers at the central government level, whereas the municipalities carry this responsibility at the local government level. Currently Slovenia has 14 ministries and almost 200 municipalities. A thorough analysis of the situation would require an extensive and time-consuming survey, as well as additional financial resources. Because of time constraints and a lack of financial resources, an in-depth explorative study was carried out that included only six ministries and six municipalities. The goal of the explorative study was to cover selected groups of services as defined by the classification of the functions of government (COFOG). The information was obtained by means of in-depth, semistructured interviews along the lines of the following questions:

- What is your area of activity at the ministry where you work?
- What decisions are you responsible for? (Decisions that affected the social and economic welfare of municipalities' inhabitants were given special attention.)
- Where do initiatives for such decisions come from?
- Please describe the informal process from the initiative to the decision.
- Do you monitor and evaluate the implementation of your decisions?
- Do you base your decisions on any statistical indicators? If yes, which ones?
- Do you monitor adopted decisions using any indicators? If yes, which ones?
- Do you have a database for monitoring and evaluating your decisions?

The following most important fields were selected for closer scrutiny:

- Education
- Health
- Social security and welfare
- Recreational, cultural, and religious affairs and services
- Housing and community amenities.

The selection of municipalities included in the analysis was predominantly based on their development level, although their geographical location and status (urban or nonurban) were also taken into account. When considering the geographical location, representative municipalities from the north, south, east, and west were selected, including those with good transport connections with the central part of the country and those with bad ones. The 6 municipalities also included one of the 11 urban municipalities.

The municipal development level was defined on the basis of variables used in the statistical analysis as explained earlier. The information was obtained from in-depth, semistructured interviews focusing on data needs and practices in the standard stages of decisionmaking (designing, implementing, and monitoring policy measures).

Data Needs and Ministries

The results of the exploratory study showed that decisions are made at the central government level on a wide variety of issues. Therefore, preparing an overview of existing statistical indicators and identifying those necessary, but missing, are virtually impossible tasks. Currently, the use of a great number of indicators is prescribed by law. By contrast, in several areas of central and local government the use of statistical indicators depends on the nature of the problems at hand and the planned and/or implemented measures. In such cases, the analytical use of indicators is determined by the purpose of a specific project, and is either carried out by ministries themselves or is delegated to authorized external institutions.

These analytical and monitoring activities usually produce results stored in databases. Often these databases are local and are not linked to each other. Their existence is known only to a narrow segment of people, and those unauthorized to do so cannot access them or can only gain access under a restricted set of circumstances.

Information collected from ministry representatives indicates that in most cases ministries are satisfied with statistical data availability at the municipal level.

In the process of designing, implementing, and monitoring policy measures, ministries mainly conduct evaluation with regard to the fulfillment of legislative goals. They do not usually look at policy efficiency.

Data Needs and Municipalities

Municipality representatives had different attitudes toward data availability. Most expressed a need for more data, especially data permitting intermunicipal comparisons. The issue of reciprocity is also important to municipalities, especially with regard to analyses conducted by ministries at the municipal level using municipal data.

Furthermore, the interviews conducted at the municipal level also confirmed the empirical fact that the degrees of freedom in preparation and implementation of municipal policy measures are directly correlated to municipalities' financial capacity.

Some municipalities focus only on activities demanded by law. Municipalities often neglect public management based on ex ante, ongoing, and ex post evaluation activities, including

analyses of efficiency, because of financial and time constraints, and also because of a lack of human resources.

Use of the Internet to access data in a more open and flexible and less costly manner could change the process of decisionmaking at the municipal level. Several positive developments can be observed, powered through the existence of various Web sites supporting intermunicipal communication. Note that municipalities do have a fairly good information technology base, although the level of exploitation of this technology depends on civil servants' computer literacy, which is sometimes rather low.

Current State of Subnational Statistics

Most data at the municipal level are collected by the Statistical Office and the Ministry of Finance (MOF). Data collected as part of the official National Program of Statistical Surveys (NPSS) both by the Statistical Office and other lawfully authorized institutions are published by the Statistical Office, whereas the MOF publishes data on municipal budgets at the aggregate level (less aggregated data are only accessible upon request).

The extent of statistical data collecting is defined in the NPSS, which is grounded in the National Statistics Act, adopted in 1995 and amended in 2001. The NPSS is mainly in compliance with the EU's requirements for statistical systems and data collection, where in the field of regional and subregional statistics the EU databases represent the framework for the relevant contents.

According to the NPSS, statistical data collection is performed by the Statistical Office and other legally authorized institutions, which include the tax authorities, the Ministry of Finance, the Agency for Public Legal Records and Related Services, and the Institute of Public Health. Of course, only some of the data provided by these institutions are appropriate for deriving statistics at the municipal level.

This overview only includes those data that can be systematically provided for all municipalities. It does not take into consideration data collected or partly collected by a minority of municipalities.

The availability of municipal statistics was examined for the period starting in 1995 with the reform of local self-government and new municipal borders. Although some changes in borders between municipalities also occurred in 1999, they did not influence the availability of statistical data used in this analysis.

For the purposes of this research project, the Statistical Office and the MOF prepared a fairly detailed overview of statistical data availability at the municipal level. Apart from the information on the type of data, the full report also contains information on data accessibility by medium and institution, frequency of collection, length of time series, and most recent period of data availability for each category. Tables 6.4 and 6.5 summarize the reports of these two data providers. (For a statistical data inventory at the municipal level see SSCB 2002, appendix III.)

General Sources of Data

Some of the more important sources of these data include the following agencies and organizations.

The Statistical Office of the Republic of Slovenia

Numerous and diverse databases exist within the Statistical Office and other authorized institutions identified in the NPSS, from which statistical data at the municipal level can be obtained. For the specific needs of data users, a tailormade computer processing can be performed. (We must note that this procedure requires considerable investment of both time and money that users often are not prepared to make.)

Table 6.4 *Data Available at the Level of Municipalities, Provided by the Statistical Office*

Statistical area	*Number of available data items*[a]
Demography	45
Labor market	11
Infrastructure	18
Environment	24
Economy	50
Education	14
Health	28
Agriculture	20
Culture	13
Tourism	15
Total	238

a. Each separately analyzed variable was counted as one data item. These data items appear as single rows of the "Subnational Statistics Needs Assessment Report" (appendix III), and could relate to a single variable (for example, the population aging index) or a complex variable (for example, population by age and gender).

Source: SSCB (2002).

In the framework of the Poland and Hungary Assistance for Economic Restructuring Country Operational Program (PHARE-COP98), the Statistical Office has started a subproject to construct a regional statistics database. The aim of the subproject is to bring together dispersed sources of regional statistics (databases, registers, statistical surveys, and so on) and merge them on a common information technology platform. A working prototype of such a database was set up at the Statistical Office in early 2002. The regional statistics database project is based on the Oracle Data Warehouse microdatabase, in which quarterly snapshots from main national registers are loaded from 1995 onward (where applicable). In addition, the database includes snapshots from selected statistical surveys. To give users fast and easy access to this data warehouse, an Oracle Discoverer client tool was implemented for macro (aggregated) data exploitation.

Also in the framework of the PHARE-COP98 project, another subproject, the agriculture census, has been implemented at the Statistical Office. Results of the agriculture census conducted in 2000 were stored and are now available for exploitation through the Oracle Discoverer client tool. Because of data confidentiality, statistical data from this census were only being made available to users following a written request. Selected data from the agriculture census will be available online later in 2003. The same is also true for the results of the 2000 horticulture census.

Table 6.5 *Data Available at the Level of Municipalities, Provided by the MOF*

Category[a]	*Number of data items*[b]
Revenues and expenditures (economic classification)	285
Functional classification of expenditures (COFOG)	79
Balance sheet	21
Municipal debt	15
Transfers to municipalities	8
Total	408

a. Within categories, each of the budget items exists in several versions for a calendar year (estimate for the past year, estimate for the current year, and plan for the next year).

b. See table 6.4.

Source: SSCB (2002).

The Ministry of Finance

Public finance is regulated by the Public Finance Act, the Accounting Act, the Municipal Financing Act, and a number of decisions by the Constitutional Court. Based on this legislation, the MOF collects and analyzes data on municipal revenues and expenditures by economic classification, data on municipal expenditures by functional classification, data on and from municipal property statements, as well as data on borrowing by municipalities.

Municipalities are also financed from the central government budget, and the MOF handles the municipalities' financial equalization. The MOF prepares a proposal for the government, which then decrees the appropriate expenditure and allocates municipal equalization grants for the next budget year. Expenditures and grants at the municipal level are calculated on the basis of the appropriate expenditure per capita, which is determined each year by the National Assembly.

The economic classification of government transactions was introduced in 1999. It is used in preparing both central and local government budgets, and its use enables methodologically uniform, mutually comparable, and transparent presentation of government transactions for all general government institutions. The classification is included in the uniform chart of accounts that the MOF has decreed must be used in budgeting.

The functional program classification and the functional classification are used to break down public expenditure into individual functional purposes as follows:

- The functional program classification is used solely for the budget purposes of the central government. The MOF expects to supplement the existing functional program classification according to municipal needs in the areas of budget expenditure, as well as tasks performed and programs implemented by municipalities. At present, however, data on municipal expenditure by the functional program classification are not available at the ministry.
- The functional classification is used to break down general government expenditures into individual functional purposes of the state and municipalities. The functional classification is harmonized with the international standard COFOG, thereby facilitating direct international comparisons. The functional classification shows expenditures by direct and indirect users of central and local government budget funds.

The Decision Support Information System

The decision support information system (InterISPO) is part of the information technology support to the government and public administration. Operated by the Government Information Technology Center, it is used as a standard in Slovene government administration and, in essence, is an upgrade of information systems used by different government bodies. Its primary goal is to gather data from different fields and present them in a uniform and transparent way. The use of InterISPO as a decisionmaking tool is quickly spreading to administrative units and other government institutions.

InterISPO has two parts:

- The external part consists of statistical reviews and can be accessed both by external and internal users.
- The internal part contains data that can be accessed only by public servants through dynamic queries (meaning that these data can be extracted and presented in different ways depending on the analytical goals of the user).

The external part of InterISPO includes the following data:

- Wages and earnings by administrative units, municipalities, statistical regions, and standard classification of activity
- Active population by administrative units, municipalities, statistical regions, and standard classification of activity
- Imports and exports
- Consumer prices
- Producer price indexes
- Retail price indexes
- Registered unemployment
- Registered unemployment rate
- Different public opinion surveys.

The internal part of InterISPO contains the following data:

- Data on employees in public administration
- Data on the working bodies of the government
- Telephone directory of the government and its institutions.

The InterISPO also maintains an archive. Further details about the InterISPO are available online at http://sigov2.sigov.si/cvi/slo/index_slo.htm.

The Ministry of the Interior

The Ministry of the Interior publishes the *Statistical Yearbook of the Ministry* every year. The yearbook includes all statistical data pertaining to the work of the Ministry of the Interior (data on criminal offenses, public order and safety, and so forth) and other data about the organization of the ministry, its employees, and other areas. Selected statistical datasets of the ministry are also available online at http://www.mnz.si/si/index.html (for example, data on registered vehicles, number of driving licenses, ages and types of registered vehicles, and so forth).

The Office of Local Self-Management of the Ministry of the Interior finances the project on developing indicators for municipal decisionmaking jointly with the MOF. The project is coordinated by the University College of Public Administration. The indicators are classified into three groups, namely:

- For monitoring municipal programs
- For monitoring municipal property
- For monitoring municipal budgets.

The Ministry of Labor, Family, and Social Affairs

A selection of data provided by this ministry are available online only at http://www.sigov.si/mddsz/uvzd/stat/statist00.htm, for example, data on injuries at work.

The Ministry of the Economy

Municipalities can obtain information on public procurement online at http://www2.gov.si/mg/mgslo.nsf. This ministry is responsible for several projects that directly pertain to municipalities.

- The integrated tourist information system project is being run in cooperation with the Slovene Tourist Organization. Several projects were planned for 2002 and 2003, for example,

developing and introducing a tourist information portal and establishing a central database. In the future, the latter should serve as a basis for policy decisionmaking both within the Slovene Tourist Organization and at the level of municipalities.

- The tourist information system for 16 municipalities by the Austrian border was a cross-border project conducted within the framework of the PHARE program and was completed in 2001. All municipalities involved in this project are linked by a computerized information system and are capable of creating up-to-date tourist information.

The Ministry of Education, Science, and Sport

The Slovenian unit of the Information Network on Education in Europe is functioning in the Ministry of Education, Science, and Sport. This network offers a well-established source of regularly updated information on the diversity of education systems in Europe. Details are available online at http://www.mszs.si/eurydice/e_default.htm. Several publications prepared by the ministry can be downloaded at http://www.mszs.si/eurydice/pub/br_1999.htm. *Education in Slovenia* includes statistical data on education in Slovenia.

The Institute of Macroeconomic Analysis and Development

The Institute of Macroeconomic Analysis and Development is a government body whose Web site (http://www.sigov.si/zmar/apublici.html) offers interesting data and information, mainly of a macroeconomic nature. This information is of interest to municipalities predominantly as indicators of the general macroeconomic situation.

The institute is engaged in extensive publishing activity and has its own library and documentation center. Its publications include six periodicals, of which four are published monthly (and two are available in English). In addition, the institute also publishes about four books each year. Its *Development Report* is published annually, with the first issue appearing in 2001. The following are short descriptions of the institute's periodicals:

- The *Slovene Economic Mirror* has been published monthly since January 1995. Selected key indicators show trends in economic development. The achievement of annual targets set in such government macroeconomic documents as the *Spring Report*, the *Autumn Report*, and the *Budget Memorandum* is evaluated and commented upon. Also included in the publication is a statistical appendix with the main figures on economic trends published by domestic and foreign institutions, such as the Statistical Office, the Bank of Slovenia, the Agency for Public Legal Records and Related Services, and the National Employment Office.
- The *Spring Report* provides a short-term analysis of economic trends, projections for the current year and the years to follow, the main orientations of economic policy, an overview of structural reforms, and progress made in preparation for EU accession, as well as an analysis of development. The analysis and conclusions concerning the national economy are based on the system of national accounts. The publication serves as a basis for drawing up the state budget. At the same time it aims to assess the extent to which actual development has been in line with the strategy for economic development and the state development program. This helps the authorities identify necessary changes in development policies.
- The *Autumn Report* provides a short-term analysis of economic trends, projections of macroeconomic aggregates for the next four years, and information about the main directions of economic policy. This publication provides the government with information on the latest economic developments in the country and abroad, and allows the government to adjust the state budget draft if necessary. Medium-term projections in this publication are used as a basis for multiyear budgetary planning and preparation of the *Budget Memorandum*.

- Another series of publications is entitled *Working Papers*. This includes methodological research, data series, and detailed results of analyses. One of the standard elements of the series is the working paper on regional issues, published periodically since 1994. The paper extensively analyzes regions on the basis of socioeconomic indicators and includes maps showing the spatial dimension of particular data or indicators. The statistical appendix includes the latest data and indicators on the level of development of different territorial units, including municipalities.
- The *Development Report,* first published in 2001 and subsequently available annually, monitors the implementation of the strategy for the economic development, which was adopted in July 2001. The report assesses the country's progress in sustainably raising welfare by improving development factors or mechanisms defined by the strategy. A constituent part of the report is an appendix with a set of indicators for monitoring the progress achieved.

Sources of Municipal Data

As already mentioned, municipalities can obtain data for their analyses from different data sources provided by various institutions. On the one hand there are data from periodical statistical surveys, on the other hand there are several administrative and statistical registers, as well as different databases containing individual statistical data that can be aggregated at the municipal level. On request, special processing of variables can be performed directly in databases according to users' specific interests. The following paragraphs describe the sources of municipal data in more detail.

The Register of Spatial Units

The data from the Register of Spatial Units have been available in digital form since 1995. The register contains addresses and house numbers, and thus enables the geocoding of individual statistical data. This capability is extremely important for aggregating individual data at all higher territorial levels, including the municipal level.

The register also contains boundaries, names, and nomenclatures for all territorial units as defined by the Governmental Decree on Standard Classification of Territorial Units, adopted in March 2000. The register is available online to all government institutions. There users can find georeferences and can derive the acreage of all territorial units.

The register is run by the Surveying and Mapping Authority. Information is also available online at http://www.sigov.si/gu/gu.html.

Central Population Register

The Statistical Office started developing the Central Population Register in 1954 by setting up registers at the municipal level. The register's management was transferred to the Ministry of the Interior in 1999. Although it is the most extensive register of individual data on citizens of Slovenia and foreigners with permission to work and/or live in Slovenia, only quarterly snapshots from this register are available in the Statistical Office's *Rapid Reports*.

Business Register of Slovenia

The Business Register of Slovenia was set up by the Statistical Office in the 1970s, originally in the form of two registers (the Register of Organizations and Communities and the Register of Establishments). In the mid-1990s these two registers merged into the Business Register, which contains data on all lawfully registered business entities. The data are accessible to the public.

Statistical Register of Employment

The Statistical Office constructed the Statistical Register on Employment by combining data from the National Pension Agency and the National Health Agency (using the common questionnaire on employment), as well as data from the Central Population Register and the Business Register of Slovenia. The register contains records on residents of Slovenia who are either in paid employment (employed by a public or private organization) or are self-employed (are owners or co-owners of the organizations where they work). Variables such as age, gender, education level, professional skills, residence, workplace, economic activity code, sector of employment, and so forth can be found in the register.

Quality of Municipal Statistics

Eurostat defines statistical quality using the following parameters: relevance, accuracy, timeliness and punctuality, accessibility, transparency, comparability, coherence, and completeness (Franchet 2002, p. 1).When evaluating the quality of statistical data available at the municipal level, in the framework of our project (SSCB project), attention was given mainly to their accessibility and completeness. Studying the accessibility and completeness of municipal statistics also raised the issues of data relevance, comparability, and coherence. Other quality parameters were not explicitly analyzed.

The results of evaluation show that NPSS data accessibility is good, because many of these data are published online by the Statistical Office (also at the municipal level). The *Statistical Yearbook of the Republic of Slovenia* has been available online since 1995. Also accessible online is the *Bank of Statistical Data*. The series *Results of Surveys* is available in print and on CD-ROM and provides users with detailed data, for example, in the field of demography or the labor market.

Several problems with data accessibility at the municipal level stemming from the known limitations of statistics in smaller areas can be identified, however, as follows:

- The number of units of observation at the municipal level is often smaller than the legislative minimum that has to be observed to allow for personal data protection, and this shortfall results in unpublished indicators, for example, the number of people employed in an industry at the municipal level with only one or two active business units in this industry.
- Sample sizes for statistical surveys such as the labor force survey or the household survey are predetermined at the national level. Often, the results at the municipal level cannot be published because of insufficient sample size.
- Different ministries and agencies of the central government use different and sometimes overlapping territorial subdivisions in their organization, and the administrative data they collect sometimes reflect these subdivisions. Most, but not all, ministries and agencies use common territorial administrative units (58 of them) because prior to the adoption of the new legislation in 1994, these functioned as municipalities.
- Macroeconomic concepts are not directly applicable at the subnational level, and the compilation of economic variables at the subnational level calls for different methodological considerations. Therefore additional methodological efforts are needed to provide data (for example, on value added) at the municipal level to assure the relevance of these data for small areas.

Access to municipal data not included in the NPSS can be extremely problematic, because these are mostly internal data of ministries and other government bodies are internal and available only upon request.

One of the largest problems data users face is that the data are in various separate databases, raising the issue of data coherence and comparability. Table 6.6 calls attention to the fact that to plan and monitor policy measures in a selected area (either at the level of central or local government), data from various unrelated fields of statistics must be combined. To plan and monitor policy measures in the area of education, for example, practically all fields of statistics are needed (with the exception of the environment statistics).

Table 6.6 also indicates that, at least at the general level, the coverage of policy areas with the corresponding fields of statistics can be deemed fairly good, and thus statistical criteria for data completeness are satisfactorily met. Nevertheless, in some areas statistical indicator coverage is either insufficient (for example, coverage of new economy, coverage of public enterprises, poverty measurement) or too infrequent (for example, censuses in the fields of education and agriculture).

Development of Municipal Statistics: Assessment of Possibilities

Analysis of strengths, weaknesses, opportunities, and threats (SWOT) was used as a tool to systemize and integrate the main findings of the separate aspects of data needs analysis at the level of municipalities. Positive and negative circumstances that directly concern stakeholders of municipal statistics were categorized as either strengths or weaknesses. The circumstances stemming from the broader environment were qualified as opportunities or threats. The results of the SWOT analysis are presented in table 6.7.

The results of the SWOT analysis indicate possible paths for further development of municipal statistics, building on identified strengths and opportunities with the goal of reducing the existing weaknesses and threats to the development of municipal statistics.

The prime strength is fairly extensive, rich, and internationally comparable municipal statistics that benefit mainly from some of the distinctive features of the Slovene statistical system.

Table 6.6 *Usefulness of Statistical Indicators for Policy Areas*

	Policy area (COFOG)						
Field of statistics	*Economic affairs*	*Environ-mental protection*	*Housing and community*	*Health*	*Recreation and culture*	*Education*	*Social protection*
Demography	M	L	H	H	H	H	H
Labor market	H	0	H	M	0	H	H
Infrastructure	H	H	H	M	L	L	M
Environment	L	H	H	M	H	0	0
Economy	H	M	H	M	L	L	L
Education	H	0	L	L	L	H	M
Health	L	M	M	H	L	L	L
Agriculture	H	H	H	H	0	L	L
Culture	0	0	H	0	H	H	0
Tourism	H	H	H	L	H	L	L
Public finances	H	H	H	H	L	H	H

H High usefulness of indicators for a policy area.
M Medium usefulness.
L Limited usefulness.
0 Not applicable and/or not relevant.
Source: SSCB (2002).

Table 6.7 *Results of the SWOT Analysis of Municipal Statistics in Slovenia*

Strengths	**Weaknesses**
• Fairly extensive, rich, and internationally comparable set of data available • Registers function as database integraters and data sources at the disaggregate level • Statistical surveys mainly carried out on a full coverage basis, therefore data for municipalities are available even though their use might be limited because of demands imposed on users by the Personal Data Protection Act • General orientation to dissemination of statistics via the Internet • Sporadic awareness raising and educational activities at the level of municipalities	• Heterogeneity of municipalities • Low fiscal capacity of municipalities • Low statistical capacity of municipalities • Weak public management • Certain areas of statistics either not developed or developed only to a limited extent • Limited data access
Opportunities	**Threats**
• Initiatives for intermunicipal cooperation • Initiatives for e-government • Initiatives for training government officials • International cooperation • Research projects	• Human and financial constraints • Further fragmentation of municipalities • Bureaucratic obstacles to cooperation • Municipal data not included in the NPSS overseen by the system

Source: SSCB (2002).

They are characterized by efficient adoption of international statistical standards and requirements (in particular, of Eurostat) and rapid introduction of electronic media for data dissemination in the last decade on the one hand, and by traditionally register-oriented statistics on the other hand. At the same time, Slovenia has not abandoned the full-coverage approach of statistical surveys that marked the socialist statistical system of data collection in the framework of the former Yugoslavia. Although full coverage of statistical surveys is questionable at the national level, together with register data, it represents the main source for municipal statistics. The full coverage approach will gradually be replaced with the use of sampling techniques. Thus the availability of other existing data sources at the municipal level will have to be explored, for example, administrative data records of tax authorities, and more efforts will have to be devoted to research into and implementation of sampling techniques for small areas.

The prime weakness is the low exploitation of municipal statistics, which results from low statistical literacy and weak public management in general. The problem is particularly aggravating in the many small municipalities facing serious shortages of human and financial resources.

For small countries with fragmented subnational levels, the development of municipal statistics is a relatively expensive investment, as the costs of development are mostly fixed, and thus independent of country size. Conducting activities toward the same goal in a coordinated network of municipalities and ministries is therefore of utmost importance.

One of the possible paths for development are initiatives introduced in the framework of the Association of Municipalities and Towns.

The improvement of information flows at the local level is also one of the tasks pursued by the Agency for Regional Development and the Office for Local Self-Government (see the latter's Web site at http://www.gov.si/loksam/index.html for more information).

Another initiative with the objective of improving existing information about the functioning of municipalities resulted in the creation of the Web site available at http://www.obcine.net/.

Statistics play an important role in e-government projects, which many countries and international institutions are currently involved in (see Finn and Giovannini 2002 for more information). At least some activities necessary to develop statistics at the municipal level can be conducted in the framework of an e-government program.

Another platform for creating synergies is various international projects. Examples include the development of a regional database in the framework of the PHARE-COP98 project, the joint SSCB project, as well as research carried out in academia, for example, at the University of Ljubljana's Faculty of Economics or the University College of Public Administration.

Two opportunities not to be neglected are education and training activities aimed at public servants. Such activities should focus on statistical literacy.

All these opportunities can only be realized if all those participating in the collection and use of data cooperate and if bureaucratic impediments to cooperation are removed.

The creation of an efficient and rational information system at the municipal level demands both the exploitation of existing data with clear, predefined terms for their use and an analysis of the utility of existing administrative sources for filling in the gaps before embarking on new statistical surveys. Several factors influence the rationality of the system, in particular, the instability of municipalities in terms of the tendency toward further fragmentation. Instability causes problems stemming from time series discontinuities and increased costs for constructing comparable series.

The development of municipal statistics is not only the concern of statistics. The analysis identified several areas in need of improvement with regard to the use of statistics in decisionmaking processes at the level of municipalities. These areas are information technology support, public management, and general aspects relating to both systems and institutions.

The Needs Assessment Workshop: Summary and Recommendations

The findings of the needs assessment report were discussed in depth in the framework of the Needs Assessment Workshop, conducted in Rogaška Slatina on June 21, 2002. The participants (the majority of them stakeholders) came from institutions such as the University of Ljubljana; the Statistical Office; the Ministry of the Economy; the MOF; and the Ministry of Labor, Family, and Social Affairs, as well as from representative municipalities.

The main findings and recommendations are summarized below:

- **The availability of statistical data at the municipal level with regard to variety and coverage is fairly good.**

  Recommendation: Some gaps at the municipal level (economic indicators for smaller areas, poverty and educational level of the population, indicators of new economy) should be addressed in the development documents of official statistics.

- **Exploitation of existing data at the municipal level is poor.**

  Recommendations:
  — Introduce an information gateway on municipal statistics as soon as possible. Its portal should be based on cooperation among all institutions collecting data at the municipal level. It should include the basic metadata and provide completion information on the availability and accessibility of data at the municipal level, both data

from the official NPSS and those not included in NPSS but regularly collected, for example, by the ministries.
— Prepare case studies of statistical analysis on the socioeconomic characteristics of municipalities for identified clusters of municipalities, and prepare a pilot project measuring the satisfaction of residents in municipalities.

- **Statistical literacy of the users of municipal data is poor and results in the inefficient use of available municipal data.**

  Recommendation: Prepare an educational program aimed both to increase decisionmakers' awareness of the usefulness of statistics as a basis for decisionmaking at the municipal level and to enhance users' statistical literacy and familiarity with statistics in general.

- **Publication of municipal data is dispersed and segmented by subject domains of statistics.**

  Recommendation: Develop databases containing the minimum number of necessary statistical indicators of economic and social welfare for municipalities as identified by several international statistical institutions.

- **The flow of information is almost entirely one sided, from municipalities to producers of statistical indicators, that is, bottom-up instead of top-down, especially as far as statistical data collected outside the framework of the NPSS are concerned.**

  Recommendation: Analyze the existing formal, technical, and legal conditions of data accessibility, especially those not collected in the framework of the NPSS, and design transparent and consistent rules regulating access to these data and their use, as well as the use of data aggregated at different levels.

- **A municipality is a complex social entity whose economic, social, and other characteristics can be observed from within its borders as well as from outside. This fact should be taken into account when designing the system of municipal statistics.**

  Recommendations:
  — Form an expert body for municipal statistics to act as an advisory board to the Statistical Office.
  — Develop a concept of integrated statistical databases and prepare strategies for its implementation.
  — Stimulate research efforts focused at the level of municipal statistics both from the viewpoint of statistics and methodology and from the viewpoint of the role and activities of local governments.

The foregoing findings and recommendations were approved by the stakeholders as a platform for preparation of the action plan for developing municipal statistics in Slovenia as the main outcome of the SSCB project.

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7

Ukraine

Oksana Remiga, Oleksiy Bakun, Olga Mrinska, and Olena Romanyuk

Taking into account the recent radical changes in Ukraine's system of intergovernmental relations, the question of data quality at the subnational level is extremely important. Government-wide discussions are focusing on the optimal level of decentralization, the assignment of such roles as taxation, and the expenditure and regulatory responsibilities of various levels of government.

The Concept for State Regional Policy, adopted by Presidential Decree on May 25, 2001, refers to the lack of systematization of government policy in the sphere of local self-government as one of the paramount limiting factors of social and economic development and stability in the country, one that triggers and aggravates many social, economic, and ecological problems. The current situation with respect to regional policy also undermines Ukraine's standing in the area of international economic cooperation.

The concept envisages substantially increased roles and responsibilities for local state administrations, local self-government bodies, and territorial communities in relation to regional development and plans a step-by-step decentralization of the powers of central government bodies.

To enable state regional strategic planning to set more accurate and well-founded regional development priorities that will ensure successful development and implementation of government policy at the local level, regional statistics should comply with the following requirements:

- Enable the construction of a reliable database to develop a decentralized budget system
- Furnish requested information on a timely basis
- Be flexible and easily adjusted to the changing needs of database users, while at the same time ensuring the continuity of historical series.

Eventually, given the priority of European integration for Ukraine as a whole, the standards and methodologies adopted by European Union countries should be the guidelines for reform of the statistical system at the subnational level. Currently, however, revising and improving the regional statistical system is an urgent necessity that will require comprehensive and coordinated efforts by both central and local government bodies as well as the involvement of all interested parties in the development and implementation of the appropriate action plan.

The Current Status and Extent of Fiscal Decentralization and the Importance of Subnational Statistics

Despite impressive progress in social and political reform in Ukraine, interaction between government authorities at different levels remains inefficient. Given that a considerable share of the resources of the consolidated budget are allocated via local budgets and that local budgets finance about 80 percent of expenditures pertaining to health care and about 40 percent of social security expenditures, the importance of resolving interaction problems between the center and the regions is hard to overestimate.

Regional Political Structure

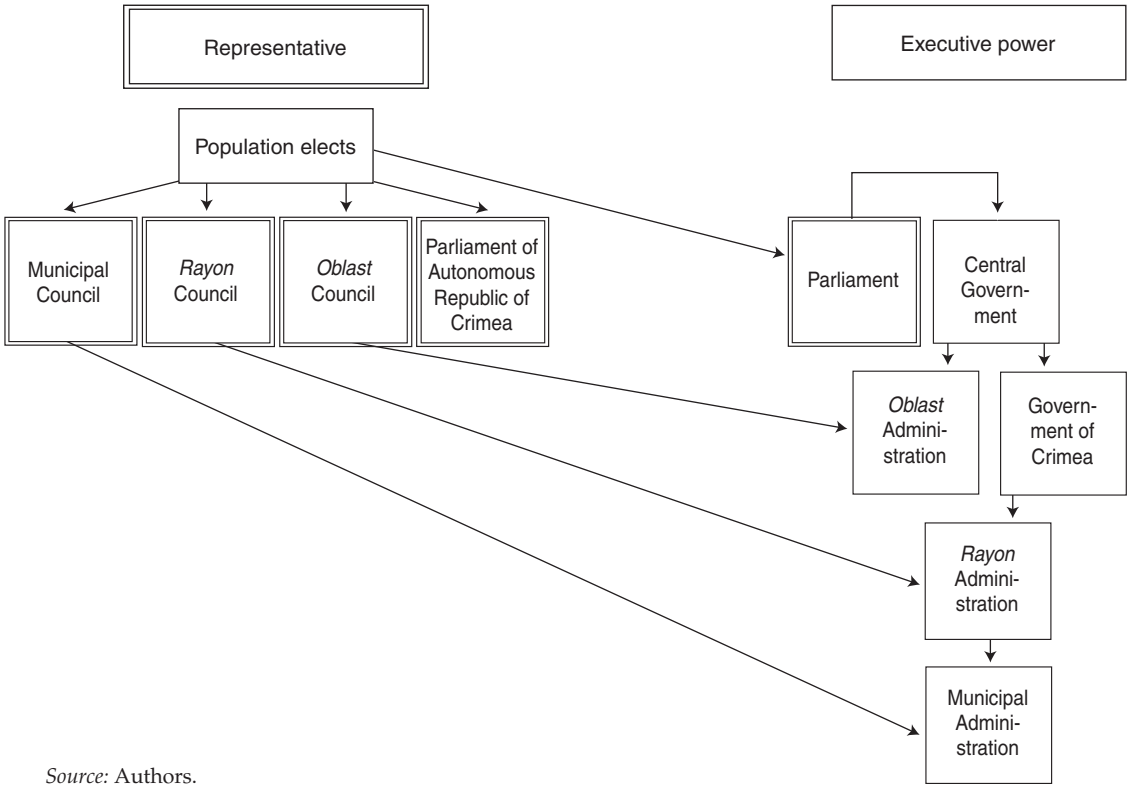
Ukraine is a unitary state that includes the Republic of Crimea as an autonomous territory. Ukraine has 27 *oblast* government bodies (including the Autonomous Republic of Crimea and cities of Kyiv and Sevastopol, which enjoy *oblast* status), 490 *rayon* government bodies, 451 local governments, and thousands of settlements and village government authorities. The representative branch of subnational governments is broken down into a three-tier structure without any hierarchical link. At the same time, Ukraine has an executive with complete vertical subordination. The executive branch is represented by subnational administrations. *Rayon* and city administrations are subordinate to *oblast* administrations, which in turn are subordinate to the central government (figure 7.1).

In practice, the system of public governance and finance is highly centralized. Theoretically, the need to reform the existing system and to move toward administrative decentralization is recognized at both the central and subnational levels. The principles of local autonomy, however, have not yet been implemented, primarily because of the lack of resources at all levels of subnational government to undertake the implied responsibilities.

The interaction between government authorities at all levels is governed by the Constitution and the laws on local self-government, on local state administrations, on the capital and the city of Sevastopol, as well as by the Budget Code. These laws define the organizational structure of subnational governments' and the scope of their responsibilities.

Although current legislation provides a reasonable framework for interactions between different levels of government, the lack of clear mechanisms to implement the law promotes the

Figure 7.1 *Structure of Representative and Executive Power*



Source: Authors.

duplication of functions. The scope of responsibilities is vague, and that vagueness complicates not only the activities of local governments at all levels, but also their cooperation. Which level of government provides services in which sector remains unclear, and which functions are executed by which branch of power within any given jurisdiction (that is, state administration or local council) are also vague. This situation reduces the effectiveness of government power at the subnational level.

Local Self-Government

The council at each level (*oblast, rayon,* and municipality) is elected by direct suffrage for a four-year term. *Oblast* and *rayon* councils are in charge of the following:

- Approving social, economic, and cultural development programs across *rayons* and *oblast*s and targeted programs in other areas and receiving reports about program execution. (A social and economic development program document defines the development strategy of each specific administrative-territorial unit and defines the policy measures that should be undertaken to achieve the development objectives of that level of government.)
- Approving *oblast* and *rayon* budgets, amending them, and approving their execution reports.
- Allocating budget funds transferred in the form of subsidies; subventions across corresponding *rayon* budgets; the local budgets of cities of *oblast* jurisdiction; and the local budgets of villages, village settlements, and cities of *rayon* jurisdiction.

Municipal (city, village, and village settlement) councils are in charge of the following:

- Approving social and economic development programs and targeted programs in other areas.
- Approving the local budget and the execution report of the budget.
- Setting local taxes and levies and establishing their rates within the ranges stipulated by law.
- Formulating off-budget (including currency) funds and approving provisions regarding these funds and reports about their use. According to the Law on Local Self-Governance, subnational governments have the right to form off-budget funds, but the Budget Code prohibits such funds.
- Adopting decisions to release local loans. According to current legislation, only cities and the Autonomous Republic of Crimea have the right to take out loans and can use only internal sources for borrowing. The right to take loans in foreign currency exists only for cities that have a populations of more than 800,000.
- Adopting decisions to take loans from other local budgets and sources and to receive funds transfers from a corresponding local budget.
- Adopting decisions to grant benefits in relation to local taxes and levies pursuant to extant legislation.

Local Executive Bodies

Executive bodies at the regional and local levels are under double subordination. Executive authority at the *oblast*, *rayon,* and municipal level is represented by local state administrations that are accountable to, and controlled by, councils. Their powers are delegated by corresponding *rayon* or *oblast* councils. Local state administrations are also accountable to, and controlled by, executive bodies of a higher rank. Local state administrations include regional departments of central agencies (the Ministry of Economy, the Ministry of Finance, the Ministry of Health Protection, the

Ministry of Labor, the Treasury, and so forth). Regional departments of some other central government agencies act as separate bodies and are not included in the structure of state administrations (the Tax Administration, the Ministry of Internal Affairs, the State Statistic Committee, and so forth).

Within a corresponding administrative-territorial unit, the state administrations ensure the following:

- Execution of state and regional programs of social, economic, and cultural development and environmental protection, and national cultural development in regions where indigenous peoples and national minorities are concentrated
- Preparation and execution of corresponding budgets
- Execution reports of corresponding budgets and programs
- Interaction of local self-government bodies.

Responsibilities of Local Governments

The scope of local government responsibilities differs by level of government and ranges from managing matters of local interest to undertaking specific responsibilities or responsibilities delegated by higher levels of government. The management of matters of local interest is mainly the responsibility of municipalities, whereas territorial planning responsibilities are the duties of the *oblast* or *rayon*. Local governments are active in education and health protection in decreasing order of importance (see table 7.1). Own responsibilities include transport, road maintenance, extracurricular activities, local welfare and social security, and other local programs. Health protection, education, and social security are classified as delegated responsibilities.

Development and Reform of the System of Intergovernmental Fiscal Relationships

The system of intergovernmental fiscal relationships was shaped under the centralized command economy. Budget planning involved the following steps. First, the Ministry of Finance prepared a draft of the state budget and the consolidated budget that included regional estimates. The Ministry of Finance also prepared proposals on the distribution of state resources between central and local budgets. At the same time *oblasts* provided their own calculations of expected expenditures. After parliamentary approval of the volume of revenues going to the *oblasts*, *oblast* administrations in turn distributed their revenues between their own budgets and *rayons*. The *rayons* then distributed their expected revenues between their own budgets and the budgets of cities, villages, and settlements under their jurisdiction. When actual revenues were lower than planned, *oblast* authorities had the option of passing on the budget deficit to a lower level, taking a sufficient share of actual revenues to cover their own planned expenditures first. *Rayons*, and then municipalities, got what was left.

Before 2000, not only the way of defining intergovernmental transfers to each *oblast*, but also the list of taxes allocated to local budgets at all levels and the share from these taxes, were all changing annually. These annual changes, coupled with nontransparent criteria for granting subsidies, meant that local authorities lacked the ability to forecast revenues, and budget planning at the local level was thus virtually impossible. Given that decisions to distribute taxes and determine intergovernmental budget transfers were adopted annually, local authorities had a stake in underestimating projected incomes while overestimating actual needs.

Local budgets were created taking into account existing social infrastructure, for example, the number of hospitals and schools that exist in the given territory. Thus local budgets tended to reflect historical expenditure levels by region and not real needs for public services.

Table 7.1 *Responsibilities of Different Levels of Local Government*

Public administration	*Republican, oblast, and city government*[a]	*Rayon government*	*Cities under rayons, settlements, villages government*
Education	Comprehensive secondary education for physically disabled citizens Professional and technical education Higher education and postgraduate education[b] Other government education programs	Secondary school education Comprehensive secondary education for physically disabled citizens if 70% of pupils are inhabitants of that given *rayon*	Preschool and comprehensive secondary education
Health protection	Primary and specialized medical care Other state medical care and sanitation programs (medical and social security expert commissions, medical judicial expertise bureau, medical statistical centers, special medical provision facilities, health centers and sanitary education activities, other programs and activities)	Public health care	Primary medical care
Social expenditures	Support for the care of disabled people Targeted social support to indigent families Compensation for people rehabilitated from Stalinist purges Orphanages and boarding schools Education and employment of disabled people Old-age homes and boarding for disabled people Boarding schools for disabled children Pension accounting centers Shelters for minors	Welfare and social security	Social services of local importance
Culture and sports	Programs and activities to implement government policy for children, youth, women, and families Other government social programs Culture and arts Amateur sports programs	Public cultural and educational programs, theater performances and shows (theaters, libraries, museums, exhibitions, local cultural centers, aesthetic education schools)	Village, settlement, and municipal local cultural centers, clubs, and libraries
Public utilities	Regional road network Water management	Upkeep of public facilities and installations	Waste collection Water supply Town heating Local roads Upkeep of municipal, public, and administrative facilities

a. Republican refers to the government of the Autonomous Republic of Crimea. City government includes Kyiv and Sevastopol.

b. Most of these functions are assigned to the state budget.

Sources: Law on Local Self-Government; Law on Local State Administrations.

Recently Ukraine has undertaken some efforts to reform the budget system. Starting in 2000, local budgets are assigned constant income sources. The 2001 and 2002 budgets were drafted based on a formula approach used to calculate intergovernmental budget transfers. The adoption of the 2001 Budget Code was a significant step forward, in which the list of revenue sources to the *oblast* and *rayon* budgets was legislatively approved. According to the Budget Code, the levels of transfers are calculated both for *oblast* and *rayon* budgets directly.

The adoption of the formula approach does not solve all the problems of fair and transparent distribution of available resources. Its design still raises the possibility of different kinds of abuse. For example, in the intergovernmental budget transfer calculation, the Ministry of Finance uses adjustment coefficients for each *oblast* or *rayon*. The methodology used to define these coefficients is not transparent, however, and thus allows the practice of an ad hoc determination of the amount of intergovernmental transfers to continue.

Local Budgets

The structure of the existing budget system corresponds to the administrative-territorial division of the state. In 2000, local revenues accounted for 8.3 percent of gross domestic product (GDP) and 29.3 percent of consolidated budget revenues, in comparison with 1997, when they were equal to 13 percent of GDP and 43.2 percent of the total revenues of the consolidated budget. Local expenditures were 9.8 percent of GDP and 35.3 of total expenditures of the consolidated budget in 2000, whereas for 1997 they accounted for 14.7 percent of GDP and 39.9 percent of total expenditures (table 7.2).

Table 7.2 *Consolidated Budget, 1997–2000*

Component	*1997*	*1998*	*1999*	*2000*
Revenues of the consolidated budget (Hrv millions)	28,112	28,916	32,876	49,118
As a percentage of GDP	30.1	27.8	25.9	28.4
State budget (Hrv millions)	15,974	15,705	19,724	34,806
As a percentage of GDP	17.1	15.1	15.5	20.1
As a percentage of total consolidated budget revenue	56.8	54.3	60.0	70.7
Local budgets (Hrv millions)	12,138	13,211	13,152	14,312
As a percentage of GDP	13.0	12.7	10.3	8.3
As a percentage of total consolidated budget revenue	43.2	45.7	40.0	29.3
Expenditures of the consolidated budget (Hrv millions)	34,313	31,196	34,821	48,149
As a percentage of GDP	36.8	30.0	27.4	27.8
State budget (Hrv millions)	20,623	16,177	19,005	31,155
As a percentage of GDP	22.1	15.6	14.9	18.0
As a percentage of total consolidated budget revenue	60.1	51.9	54.6	64.7
Local budgets	13,690	15,019	15,816	16,994
As a percentage of GDP	14.7	14.5	12.4	9.8
As a percentage of total consolidated budget revenue	39.9	48.1	45.4	35.3
Consolidated budget deficit (Hrv millions)	6,201	2,280	1,945	–969[a]
As a percentage of GDP	6.6	2.2	1.5	–0.6

a. The minus sign indicates a budget surplus.
Source: Ministry of Finance data.

Both the revenue and expenditure formulation for local budgets is achieved at two levels as follows:

- The Ministry of Finance prepares calculated indexes, which are used to determine the amounts of transfers. These calculated indexes are incorporated in the Law on the State Budget.
- Each local financial body (financial departments of local state administrations) makes a forecast for the budgets of its region.

In many cases, local financial bodies (financial departments of local state administrations)

- Either do not forecast revenue and expenditure amounts, limiting themselves to the preparation and calculation of tax bases and other information, which is submitted to the Ministry of Finance to determine the amount of interbudgetary transfers
- Or use a highly simplified approach to forecast revenue using, for instance, the rate of average collection or the efficient rate of each specific tax.

The revenue forecast for individual items of local budgets is based on

- Reported data on tax revenues from the previous period
- The revenue change for the current period
- The reported number of taxpayers
- Any change in tax legislation.

In the process of forecasting budget revenues, both macroeconomic and statistical indexes for the appropriate region are taken into account. These indexes are developed by the economic departments of the *oblast* state administrations based on the framework of macroeconomic indicators prepared by the Ministry of Economy. These indicators are

- Wage fund for public servants, small enterprise employees, and agriculture workers
- Wage arrears
- Population numbers broken down into categories
- Number of employees in industry, agriculture, at small enterprises, and so forth
- Average monthly wage of workers, public servants, agriculture workers
- Employment
- Income
- Number of profitable and unprofitable enterprises
- Inflation.

The methodology for calculating expenditures for local budgets is not sufficiently elaborated. An obsolete approach to determining expenses for some items (mainly the provision of health and education services and public utilities) is preserved, and this approach does not take expenditure efficiency indicators into account.

Local Budget Expenditures

The breakdown of local budget expenditures at different levels reveals that the *oblast* authorities spend about 40–45 percent of total expenditures on health care and social security. *Oblast* towns and *rayons* spend nearly 40–50 percent of total expenditures on education, nearly 50–55 percent

on health care, and 28–40 percent on social security.[1] The shares of towns under *rayon* jurisdiction, settlements, and villages in total expenditures on education and health protection are equal to 10–13 percent and 1.9–2.2 percent, respectively (table 7.3).

Local Budget Revenues

Local budgets' revenues can be classified into the three following groups:

- *Own revenues* (local taxes and levies, trading license fees for certain types of entrepreneurial activity, communal property profit tax, and so forth). Taking into account the limited revenue sources of subnational budgets and in line with legislative provisions, local budget authorities revise the rates of these taxes to balance the forecast amount of revenues and the need for resources.
- *Shared tax revenues. Oblast* administrations now get 25 percent of the land and personal income tax receipts raised within the *oblast*. *Rayon* administrations get 50 percent of personal income tax and 15 percent of the land tax raised on their territory. Cities under republican (Autonomous Republic of Crimea) and *oblast* jurisdiction get 75 percent of the personal income tax and all of the land tax, and towns, villages, and settlements get 25 percent of the personal income tax and 60 percent of the land tax. (Personal income tax revenues, as well as land tax revenues, collected on the territory of cities under republican and *oblast* jurisdiction are not included into the total amount of revenues of *oblasts*.)
- I*nterbudgetary transfers.* Interbudgetary transfers are of several types:
  - — Equalization transfers. The purpose of these transfers is to diminish the inequality between the expenditure needs and revenue capacity of different territorial-administrative units. The amount of equalization transfers is calculated by the formula described later.
  - — Investment grants, which go to the budget of the Autonomous Republic of Crimea and *oblast* budgets. The republican and *oblast* authorities can then distribute the investment grants between subnational governments at lower levels.
  - — Subsidies from the central budget to Kyiv and Sevastopol, the Autonomous Republic of Crimea, and *oblast* budgets to finance national social protection programs.
  - — Transfers between the subnational budgets on a contractual basis to finance public services provided by the recipient of the transfer.

Starting in 2000, revenue sources are attached to local budgets, which ensure their stable replenishment exclusively in cash. The personal income tax is the principal attached revenue source for local budgets.

Formula Approach to the Calculation of Transfers

Differences between the sizes of the revenue bases means that some local budgets have enough financial resources to support a wide spectrum of government services, whereas for some other regions financing even the minimal needs of that given territory is a problem. To provide fiscal equalization, the regional and local jurisdiction budgets that have an estimated amount of revenues higher than the estimated amount of expenditures transfer the difference to the central

1. Expenditures and revenues of cities under republican (Autonomous Republic of Crimea) and *oblast* jurisdiction are not included in the total amount of *oblast* or republican budget. The same is true for cities under *rayon* jurisdiction.

Table 7.3 *Budget Expenditures of Budgets of All Levels, 1999 and 2000*
(percentage of total expenditures)

		Elements of the consolidated budget						
Expenditures	*Consolidated budget*	*State budget*	*Republican, oblasts, cities*[a]	*Cities under republic and oblasts*	*Rayons*	*Cities under rayons*	*Settlements*	*Villages*
Total expenditures								
1999	100	54.6	16.7	14.7	10.8	0.8	0.7	1.7
2000	100	64.7	11.8	12.0	8.7	0.7	0.6	1.5
Education								
1999	100	26.5	9.4	28.4	23.5	3.1	3.0	6.3
2000	100	38.8	8.0	23.2	20.0	2.5	2.3	5.1
Health protection								
1999	100	9.4	33.0	32.3	23.1	0.4	0.5	1.3
2000	100	14.8	31.8	29.8	21.7	0.3	0.4	1.1
Social expenditures								
1999	100	47.8	12.0	21.7	18.1	0.2	0.1	0.2
2000	100	61.8	10.1	13.9	13.8	0.2	0.1	0.1
Public utilities								
1999	100	0.9	25.1	54.4	11.5	4.8	2.7	0.6
2000	100	0.2	18.9	56.0	15.5	5.3	3.2	0.8

Note: Percentage may not add up to 100 percent because of rounding.
a. Includes Kyiv and Sevastopol.
Source: Ministry of Finance data.

budget. At the same time, if subnational budgets do not have enough resources to cover their expected expenditures, they receive equalization transfers from the central budget.

Equalization transfers are calculated to cover the delegated responsibilities of subnational governments (tables 7.4 and 7.5)

Since 2001 the formula approach has been used to calculate equalization transfers. The formula defines the level of transfers from the central government to the *oblast* and *rayon* governments or from subnational governments to the center. To expand budget decentralization to the municipal level, more complete information is required about municipal fiscal parameters.

The amount of the equalization subsidy (Ti), allocated by the state budget, which is granted to the budgets of the Autonomous Republic of Crimea, *oblasts*, the cities of Kyiv and Sevastopol, cities of republican jurisdiction of the Autonomous Republic of Crimea and *oblast* jurisdiction, and *rayons*, or funds that are transferred from these budgets to the state budget are calculated on the basis of the difference between the calculated index of the expenditure amount (Vi) and the forecasted index of budget revenues (income basket) accumulated on territory (Di), with a equalization ratio ($\acute{\alpha}i$) and a relative deceleration coefficient (βi), according to the following formula:

$$Ti = \acute{\alpha}i\,[Vi - (Di - Di \times \beta i)].$$

The forecasted index of budget revenues is calculated on the basis of the data on actual tax revenues and budgetary fees for the last three budget periods (reference period) before the planned budgetary period. This approach puts a big emphasis on temporary processes that took place in

Table 7.4 *Local Budget Expenditures and Revenues Included in the Calculation of Interbudgetary Transfers*

Local budget expenditures	*Local budget revenues*
Public administration	Personal income tax
Education	Land tax—25% of the land tax collected on the territory of the Autonomous Republic of Crimea and the corresponding *oblasts*; 15% of the land tax collected at the territory of villages, village settlements, *rayon* centers
Health care	State duties in the part directed to corresponding budgets
Welfare and social security	License fees
Public cultural and educational programs, theater performances, and shows (theaters, libraries, museums, exhibitions, local cultural centers, aesthetic education schools)	Fees for state registration of individual entrepreneurs
Other government social programs	Fees for a trade license to engage in certain types of entrepreneurial activity (except for trade license fees for petrochemicals sale sites)
Culture and arts	Administrative fines
Amateur sports programs	Single taxes for small business entities in the part directed to corresponding budgets

Sources: Law on Local Self-Government; Law on Local State Administrations.

Table 7.5 *Local Budget Expenditures and Revenues Not Included in the Calculation of Interbudgetary Transfers*

Local budget expenditures	*Local budget revenues*
Transportation and road maintenance	Local taxes and levies directed to local self-government budgets
Extracurricular activities	100% of the land fee directed to the budgets of the cities of Kyiv and Sevastopol
Local welfare and social security	75% of the land fee directed to the budgets of republican (Autonomous Republic of Crimea) and *oblast* centers
Other local programs	60% of the land fee directed to the budgets of villages, village settlements, *rayon* centers, and their associations
	Tax collected from vehicle owners
	Interest on the use of temporarily out-of-circulation budget funds
	Trade tax
	Dividends
	Payment for environmental pollution in the part directed to the corresponding budget
	Money from communal property sales, including land plots not fit for agricultural purposes
	Fixed agricultural tax in the part directed to local self-government budgets
	Other proceeds specified by law

Sources: Law on Local Self-Government; Law on Local State Administrations.

the past, for example, the massive repayment of wage arrears in 1999 and 2000. It also does not take into account future structural changes in the specific territory, for example, a mine closure that is planned for 2002 and 2003.

The calculated expenditure index for each *oblast* and *rayon* is defined on the basis of the expenditure norms of the budgetary provision for each specific expenditure. Expenditure norms of the budgetary provision are calculated within the limits of the available resources for each type of delegated responsibility. Those norms are adjusted with respect to regional differences in the price level for delivery of services and regional differences in social, economic, ecological, and climate conditions. The methodology of adjustment is somewhat subjective. Further development of the expenditure index will require more complete information reflecting the specifics of each *oblast*, *rayon*, or municipality. For most expenditure items, population or the number of public service users is employed as the basis for the calculation.

The equalization ratio ($\acute{\alpha}i$) is used for local budgets that transfer their funds to the state budget, with individual values from 0.8 to 1.0 depending on the average annual growth rate of the index of amount of fixed revenues (income basket) of the budget of the administrative-territorial unit i for the years that are the basis for the calculation of the index of relative taxability. The level-smoothing factor ($\acute{\alpha}$) is used to change the transfer amount to those donor regions that during the last three years demonstrated growth in actual budget revenues. This approach suggests an incorrect consideration of historical revenues, because

- Creating incentives (as opposed to disincentives) for those jurisdictions that have a potential for revenue increases is advisable.
- Criteria of income growth in previous periods should be applied to all local budgets, that is, both donor and recipient budgets.

The relative deceleration coefficient (βi) can have individual values from 0 to 1.0 depending on the intensity of increase of the amount of fixed revenues (income basket) of the budget of the administrative-territorial unit i for 2000 and 2002. The β-coefficient is aimed at restricting the forecast revenue level for those local budgets in which the actual level of bulk revenue would increase by more than 65 percent from the previous year. This automatic limitation of revenue growth in some regions does not allow adequate evaluation of the real revenue potential of Ukrainian regions in the formula calculations. Moreover, the choice of regions whose revenues will be automatically restrained still remains subjective.

The legal adoption of the formula approach for calculating interbudgetary transfers has hampered proposals to improve the formula, but the process of submitting proposals to the Ministry of Finance to improve the expenditure calculation formula for local budgets is becoming more active. The proposals deal mainly with improving the formula for the expenditure calculation on the basis of more detailed receivers' contingent indexes.

Monitoring Budget Implementation

According to Budget Code provisions, the implementation of appropriate local budgets is ensured by

- The Council of Ministers of the Autonomous Republic of Crimea
- Local state administrations
- Executive bodies of appropriate councils or by city, town, and village heads.

From January 1, 2002, according to Budget Code provisions and according to the Law on the State Budget, treasury services to local budgets in terms of revenues are fulfilled by territorial

agencies of the State Treasury. Territorial agencies of the State Treasury develop analyses, prepare reports on local budget implementation and other financial reports, and submit them to the appropriate financial bodies. All the aforementioned documents are written in the format determined by the State Treasury and coordinated with the Ministry of Finance and Accounting Chamber. Summary data on budget implementation are simultaneously submitted (usually by the 25th day of the month) to the Ministry of Finance of the Autonomous Republic of Crimea, the financial bodies of local state administrations, and the financial departments of executive bodies of appropriate councils.

Local financial bodies provide regular current monitoring of budget implementation, revenue and expenditure analysis, and forecasts. Special attention is paid to the following criteria:

- Revenue fluctuations throughout the year
- Dynamics of revenue increases as a proportion of local economic growth
- Proportion of local budget expenditure funding
- Analysis of planned revenue shortfalls (granted privileges, inadequate rates of economic growth, administrative factors, and so forth).

Regular monitoring of local budget implementation is provided at the central level by the Ministry of Finance, the State Treasury, and the Main Auditing and Inspection Department as well as at the *oblast*, *rayon*, and municipal levels.

The problems with budget implementation monitoring relate to the lack of indicators on the efficiency of budget expenditures, to the lack of statistical information on the day-to-day changes in budget responsibilities, and other factors.

Fiscal Policy Requirements for Improved Subnational Statistics

Substantial efforts are being made to reform the highly inefficient and nontransparent system of intergovernmental relations. The introduction of a formula-based approach to transfers between different levels of government, which was used for the formulation of the 2001–2003 budgets, took a step in that direction. However, the information sources for reforms at the regional level remain poor. The lack of clearly defined priorities for subnational statistical agencies leads to a situation where collecting information of limited use takes scarce resources away from data producers, while decisionmakers at both the central and local levels are unable to get the necessary data series.

Improving Regional Development Policies

Ukraine's regional development differs substantially between regions because of different historical, economic, and political factors. The value added per capita varies greatly (see appendix table 7A.1). Differences between incomes across regions as measured by wages, salaries, and other income components per capita are even more dramatic. For example, income levels of the Kyiv *oblast*, measured in this manner are 7.3 times the income levels in the Chernivtsi *oblast*. This gap is increasing with time (see appendix table 7A.2). Cross-regional differences in unemployment rates are equally huge, varying from 8.5 percent to 17.3 percent (2000 data).

Regional development is an important policy priority for the Ukraine, but to work out well-balanced regional development policies both at the central and local levels, planners need statistical information that would furnish quantitative estimates of unequal regional development. Such data must enable policymakers not only to analyze the current situation, but also to track the results over time of the application of regional development policy measures. Key indicators

of regional development must be identified. Most of the standard estimates of economic development are currently available only at the *oblast* level, when available at all. Coverage of such data must be expanded to include *rayons* and municipalities as well.

Improving the Approach for Determining Intergovernmental Transfers

The formula approach to calculating interbudgetary transfers has been implemented only recently. Adjustment and improvement of the calculation formulas are ongoing, which places high demands on the development of comprehensive data at the microlevel.

The formula approach employed to draft intergovernmental budget transfers enhances the transparency and predictability of the interactions between central and local budgets at all levels, but it does not solve all problems. The methodology used to calculate specific expenditures for the local budgets at all levels in most cases takes into account population or the number of consumers of specific services, instead of an estimation of the real needs for public services. For example, in the Odessa *oblast* the number of people infected with AIDS and tuberculosis is much higher than the Ukrainian average, but the amount of expenditure on health protection for the Odessa *oblast* calculated by the formula does not capture that fact.

The current shortcomings in the formula approach to the allocation of state funds to the various subnational governments can be corrected only by gathering more detailed subnational statistics that would more clearly identify special needs for public services. Such statistics would, in most cases, measure indicators associated with public health, levels of education, and public infrastructure. In cases where the appropriate data are captured, they are currently reported only at the *oblast* level. An effort must be made to generate such statistical data at the more local levels of government if an equitable and efficient allocation of intergovernmental budget transfers is to be realized.

Measuring public services requirements more accurately at the local level is not the only budgetary requirement that requires better subnational statistics. The price level for goods and services differs between regions. Information about price differences across regions does not cover all the requirements of the budget process. The only regional price data that the State Statistics Committee can offer regards prices in retail distribution networks. The set of goods and services, tracked by the statistical agency, cannot be used for budget formulation, for example, to accurately plan state purchases at the regional level. Thus more complete subnational data on prices are required to ensure a more efficient and equitable distribution of state funds to the various regions.

Current State of Regional Statistics

Regional statistics are produced by different agencies. Regional (*oblast* and *rayon*) branches of the State Statistics Committee perform the key role in the production, processing, and distribution of region-specific data. Other sources, mainly administrative data, are also useful for regional governments, including data produced by different government agencies that collect and process specific kinds of data.

The compilation of statistics at the subnational data level by the State Statistics Committee starts at the *rayon* or city level, is aggregated, and then comes to the *oblast* level, where it is also aggregated and transferred to the central office. This procedure implies that intermediate results are available at the subnational level, including the *rayon* and *oblast* levels. Most of the data compiled at the national level are also compiled at the *oblast* level. Some data are also produced at the *rayon* or city levels, but not all statistics compiled are explicitly available through the reports and publications of the regional branches. Moreover, some problems arise because of limited representativeness with respect to subnational levels of detail in the surveys conducted by the State Statistical Committee.

Sources and Producers of Statistical Data

The State Statistics Committee, the State Treasury, and the National Bank of Ukraine produce statistical data used by the government to make decisions. Various administrative sources of statistics also contribute: the State Treasury, the State Tax Administration, the Ministry of Labor and Social Policy, the Ministry of Agricultural Policy, the Ministry of Internal Affairs, the Pension Fund, the Social Insurance Fund, the Unemployment Insurance Fund, and other state institutions and organizations (these data are known as departmental statistics).

The sources of information for regional and local bodies also include up-to-the-minute data submitted by the territorial units of the state authorities such as the so-called administrative statistics.

The Law on State Statistics, as amended in July 2000, regulates the work of the State Statistics Committee, as well as the procedures for gathering, processing, and accessing statistical data. Statistical data are gathered from the following sources:

- Primary statistical data given by respondents who are subject to either complete surveys or partial sampling
- Administrative data from government bodies (except the state statistics bodies), local governments, and other corporate bodies
- Banking and financial statistics, balance of payment statistics, and so forth
- Statistical data from international organizations, foreign statistical services, and so forth
- Estimations and assessments based on the above data.

The main source of data for government bodies is the State Statistics Committee, the country's central statistics body. This committee controls territorial state statistics bodies in the Autonomous Republic of Crimea, *oblasts, rayons,* and cities.

The work of administrative producers of statistical data is regulated by subordinate legislation, instructions, orders, and other documents. Technically, the dissemination of these kinds of data is under the scope of Law on Information, guaranteeing access to this information for all interested parties, but often the inter-relations and information exchange between the various collectors of statistics is informal and not properly documented. The specific legislative framework that would regulate the way administrative data are produced and disseminated has yet to be created, as required by the Law on State Statistics.

The statistical system is centralized, despite its existence at three levels: central, regional (*oblast*), and local. The State Committee of Statistics comprises 27 regional departments, including 24 *oblasts*, as well as Kyiv, the Autonomous Republic of Crimea, and Sevastopol. About 600 local departments exist at the *rayon* and city levels. All the regional and city departments are financed from the State Committee of Statistics' budget. Regional departments can conduct their own research if requested by local official agencies (primarily, state administration), if the local power bodies cover the research costs.

The responsibilities of the local departments include primary data collection and input and the first testing of information. Regional departments compile the data submitted by the local departments, as well as convert the data electronically and conduct logical testing. In addition, the regional departments analyze the data collected at the regional level and circulate it.

Classification of Data Used by Central and Local Government Bodies

The two main types of data used by central and local government bodies are statistical data and administrative data. Statistical data are official state data characterizing socioeconomic and other

processes in the country as a whole and the regions. The State Statistics Committee produces these data. Administrative data are obtained from observations performed by government bodies (except state statistics bodies), local governments, and other corporate bodies. Administrative data are processed and disseminated by appropriate government bodies.

The set of statistical indicators usually have regional cross-sections by fields of statistics with different level of regional detail. Statistical data are disseminated mostly in paper form, but also in electronic format and different forms of digital technology. Statistical data are published as statistical bulletins, digests, express accounts, or reports and provided via electronic channels such as the Internet.

Administrative data are provided at the request of government bodies, predominantly in paper form. Some electronic databases also exist, for instance, in the State Treasury and Employment Fund, and they allow different requests with a high level of subnational detail to be performed.

System of Regional Data Being Developed by Statistical Agencies

In accordance with United Nations international development goals, the statistical fields that make up the material for analysis and decisionmaking by regional governments are public finances (fiscal data), demography, macroeconomic data, social development data, and political structure data. This section provides a more detailed description of the set of existing statistical indicators used by regional governments in their analysis and decisionmaking.

Budgetary and Fiscal Statistics

Local budget implementation statistics are gathered, processed, and disseminated by territorial bodies of the State Treasury in accordance with the Law on State Budget. *Oblast* and *rayon* branches are responsible for accounting for all their expenditure and revenue transactions via the treasury account, starting in 2002. Data could be represented by the destination of expenditures details or classified according to government functions. The data are compiled according to a centrally designed accounting scheme.

Treasury branches use specific software to provide reports on expenditures and revenues to local governments. Information and reports are processed electronically. This solution may be unsuitable for local governments that have limited communication and information technology capacities.

Most of the data needed for intrabudgetary transfer schemes are generated at the central level. The formula coefficients are preset and then used to perform transactions according to previously designed formulas. Some data needed to design local budgets are still unavailable, however, namely the different social development data usually obtained from household surveys.

Population Statistics

Population data are calculated quarterly by the State Statistics Committee at the *oblast* level. The interpolation model that is used, however, uses administrative data on the registration of individuals. Population and its structure can be defined precisely by using census data. The last census was conducted in 2001.

Detailed data are available annually at the *oblast*, city, and *rayon* levels, whereas population movement data are available monthly. Data that are available at the *oblast*, city, and *rayon* levels include

- Urban and rural populations; the composition of population growth; and the grouping of *rayon*, cities, and urban settlements by population

- Resident urban and rural populations and their gender and age composition, and *rayons* and cities of *oblast* subordination group according to population by five-year intervals for those older than nine
- Demographic load of able-bodied citizens, mean age, ratios of the three main age groups (under working age, capable of working, and older) in the total population of the *oblast* and of each *rayon* and city of *oblast* subordination.

Social Development Statistics

Most social development data are administrative data and are divided between many different producers. Education statistics are produced by the Ministry of Education, and public health data are produced by the Ministry of Health. Environmental statistics are produced by the Ministry of Ecology and the Ministry of Emergencies. The State Statistics Committee provides only aggregated data on some of the indexes at the *oblast* and *rayon* levels, usually annually.

Household statistics can be obtained from observations of households based on quarterly sample surveys. A stratum sample is used, but the required error levels are achieved only at the *oblast* level for large *oblasts*. Profile improvement work after error analysis may increase representativeness at the *oblast* level. Extending the sample even further may allow analysis of indexes at the *rayon* and city levels.

Generalized social development statistics are provided by the State Statistics Committee in quarterly *oblast* social situation bulletins at the *oblast* level (in most *oblasts*). The system of indicators is characterized by an *oblast's* social situation: macroeconomic indicators, social and demographic indicators, employment and income indicators, pension indicators, material well-being indicators, personal consumption level and structure indicators, housing conditions, health care, morbidity, education statistics, and social tension indicators. The statistics consist of *oblast* data and data for each *rayon* and city of *oblast* subordination.

The State Statistics Committee also disseminates the following living conditions statistics:

- *Oblast* housing stock, its structure by subordination, mean floor area per person, number of apartments and amenities available, availability of hostels, change in housing stock, and key characteristics of dwellings. These statistics consist of *oblast* data and data for cities and rural areas, as well as for each *rayon* and city of *oblast* subordination.
- Education statistics, including data on primary schools, secondary schools, vocational schools, institutions of higher education, nonschool educational institutions, and advanced training institutions. These statistics consist of *oblast* data and data for each *rayon* and city of *oblast* subordination.

Per capita income is calculated annually based on sample household observations and *oblast* population statistics, but the required representativeness is not achieved in some *oblasts.*

Macroeconomic and General-Purpose Statistics

The State Statistics Committee produces and presents to government bodies detailed *oblast*-level socioeconomic data contained, in particular, in regional socioeconomic situation reports, regional socioeconomic situation bulletins, express reports on specific issues related to the regional socioeconomic situation, and express accounts of specific issues regarding the regional socioeconomic situation. These publications are based on a template, with small changes made in different *oblast*s. Produced by the *oblast* and *rayon* departments of the State Statistics Committee, these publications are disseminated monthly, although some of the indexes are calculated quarterly or annually. Most

of the data are detailed at the *oblast* level, including adjacent *oblasts*. Some indexes are detailed at the *rayon* or city level.

The set of indicators includes industrial production dynamics data detailed for different levels, corporate financial balances, agricultural production and sales, construction, transportation, trade, capital investment, direct foreign investment, foreign trade, labor, social indexes, and so forth.

The following data are presented monthly at the *oblast, rayon,* and city levels:

- Industrial production and nonmonetary payments for industrial goods
- Agricultural production and information about producers (such as cattle stock or condition of machinery)
- Construction, including house building
- Passenger and freight turnover
- Corporate financial information, accounts receivable and payable, including to and from city and *rayon* budgets
- Wage level, number of unemployed, and the unemployment rate
- Amounts of services provided
- Government grants to people to pay for fuel and the share of people paying their utility bills
- Arrears of wages and social benefits
- Comparative marketplace prices
- Mobility of population between cities and *rayons* and infant mortality rates
- Emission of pollutants and toxic waste and related corporate environmental costs.

The following data are presented quarterly at the *oblast, rayon,* and city levels:

- Investment in fixed capital (excluding repairs)
- Foreign trade
- Privatization progress.

Some *oblasts* rank their *rayons* by combining the foregoing indexes using rankings and generalized weighing of the indexes. In this way the government can analyze the relative levels of socioeconomic development of *rayons* and cities. Some *oblasts,* however, have yet to introduce this approach.

The ranking implies that the evaluation of the socioeconomic development of the region is developed using the centrally established methodology adopted in 2001. The index is compiled from a set of macroeconomic, industrial, scientific and innovation, financial, demographic, and labor data. The regions considered are ranked, and rankings are normalized and then weighted. The weights are determined from a poll of experts.

The macroeconomic indexes are worked out mainly at the central level.

Gross value added by industry, including per capita, is calculated annually at the *oblast* level with about a year's delay, mainly because of the peculiarities of gathering intermediate consumption information. The region's shares in total production, intermediate consumption, and value added are also calculated in current and comparative prices,.

Monetary statistics are produced only centrally by the National Bank of Ukraine. The accountability of legal entities at the location of registration,[2] however, often makes statistical analysis difficult, or even impossible.

2. This refers to reporting by the headquarters of banks, which consolidate all the financial results of branches operating in different regions. Such a situation results in a distorted reflection of financial operations by regions.

Political and Territorial Structure

Data on political and territorial structure are available in a form of a general outlook by the State Statistics Committee. Also the Ministry of Internal Affairs and the State Committee on Land hold the complete register of all administrative districts, cities, and villages. Voting procedures are legislatively defined and changing slowly, implying less demand for this sort of statistics. No specific information on political parties is centrally compiled.

General Assessment of the Quality of Statistics Produced on the Regional Level

Below we will examine some of the characteristics of regional-level statistics in accordance with international standards in relation to the International Monetary Fund's Data Quality Assessment Framework.

- *Quality*. The regional level has adequate resources to calculate primary indexes and gather and process data. Information bases are created at the regional level and then aggregated, so local producers, the State Statistics Committee, and other producers of statistics can provide statistical data at the local level.
- *Detail of statistics at the regional level.* The extensive system of indexes developed for the most part by the State Statistics Committee does not allow comprehensive *rayon*-level comparison. Most data produced concern industrial, agricultural, and other production. Statistics concerning living conditions, social statistics, and other household data are less well developed.
- *Regional representativeness. Rayon*-level limitations in relation to the representativeness of sample household and labor surveys prevent in-depth analysis of social development, living standards, and other indexes. All other statistics collected by censuses do cover all regional details because of the method of collection.
- *Adequacy, accuracy, and reliability of data*. All data are sufficiently reliable, well compiled, and verified. This level of quality is ensured by a centralized methodology. In addition, regional departments of the State Statistics Committee are supposed to follow centrally developed procedures for information processing.
- *Timeliness.* Because of the bottom-up procedure in processing data flows, information is often produced sooner at the regional level than at the national level. Moreover, international organizations are satisfied with the timeliness of information, even at the central level.
- *Presentation*. On the whole, the State Statistics Committee and other organizations present available regional statistics according to the plan of activities agreed on in advance.
- *Accessibility and completeness*. These characteristics are somewhat subjective, because there is always a gap between users' needs and what the producer is capable of providing. Improving administrative data access procedures, however, and modifying the system of indexes may improve the situation.

Analysis of Procedures for Developing the System of Indexes Used by Governments at Different Levels

The State Statistics Committee's centralized structure determines the procedures for developing and modifying the system of indexes worked out by the central unit. Ministries and departments may make proposals concerning the activities plan approved annually by the Cabinet of Ministers. These proposals are introduced by the cabinet's central staff and have to be vertically coordinated with local governments, economic departments of local state administrations, and

sections of the financial departments of the Ministry of Finance. In practice, however, this system is slow and limits local governments' voice in the formation of regional statistical indexes.

Some regional producers (regional statistics departments) periodically work with users to find out what indexes local governments need, but this practice needs clearer regulation and still lacks feedback from local users.

The State Statistics Committee is switching from complete population surveys to surveys based on sampling (State Statistics Committee 2001.) The most successful examples of the latter are the labor survey conducted in accordance with the International Labor Organization's standards and the survey of households' living conditions. Region-level representativeness is designed and controlled at the stage of sample stratification and sample error calculation, but existing limitations of sample size may not allow for reaching the targeted level of representativeness at subnational levels, including the *oblast* level. Analysis by international organizations shows that these characteristics of the available statistical data can potentially be improved.

Current Practices and Extent of Statistical Data Use by Subnational Governments

Regional policy has become more important compared with other spheres of policy. The current state of statistical information, however, does not meet the needs of this new government policy priority. We propose to analyze the needs for subnational data collection according to the following key directions of policymaking:

- Developing and implementing regional policy at the national level
- Decisionmaking at the subnational level
- Formulating local budgets
- Monitoring the impact of policy conducted by regional and local government authorities.

Major Categories of Information Use

At the regional (*oblast* and *rayon*) and local levels, statistical information is used for

- Analyzing the socioeconomic situation of a particular territory
- Preparing both annual and mid-term drafts of socioeconomic development programs for the corresponding administrative and territorial units
- Drafting the budgets of the corresponding local councils
- Monitoring budget execution.

Problems of Statistical Information Related to the Development and Implementation of Regional Policy at the National Level

Insufficient financing for the purposes of regional development requires the identification of specific territories to be supported from the state budget. This need concerns both depressed areas and regions with a high level of development, which can be leveraged to provide for further national economic development.

The main problem facing government analysts in identifying territories that need support, at least at the level of administrative *rayons* and towns of regional subordination, is the absence of unified information reflecting changes in the regions' social and economic situation. Most existing information is available at the regional (*oblast*) level and is classified on a sectoral basis. The State Committee on Statistics has the existing data aggregated at the regional (*oblast*) level, and those data are sufficient for the sector ministries, but insufficient for the central government bodies

that are in charge of regional policy issues. The data from regional (*oblast*) statistical bodies at the subregional level are stored in a fragmentary fashion and are not consistent either in level or growth terms.

An integrated statistical system must also be developed to monitor the social and economic development of regions at the level of *rayons* and towns of regional (*oblast*) subordination. This system would include the figures necessary for ranking and classifying regions by the nature and gravity of their problems as well as the data available at the State Committee of Statistics, the Ministry of Economy, the Ministry of Finance, the Ministry of Labor and Social Policy, the State Employment Center, the State Tax Administration, and other entities.

The Ministry of Economy is now in the process of formulating the methodology for determining the mechanism to support depressed regions. The development of such methodology is based on principles currently applied in European Union countries. Thus the regions would receive support according to specific development objectives. For each objective a number of criteria and figures determine the extent of the problems in any given region. Currently the available statistical information does not meet the demands of this approach, and improvement is needed if the new principles of support for regional development are to be realized. The methodology for identifying depressed territories may constitute the basis for initiating changes in the statistical databases of subnational governments.

Statistics Needed for Decisionmaking at the Subnational Level

Programs of social and economic development at each level of subnational government are developed by the corresponding executive body and approved by the legislative body of the corresponding territory. The programs are supposed to give a strategic framework for the policy measures adopted by subnational governments. Officially, socioeconomic development programs for *oblasts, rayons*, or cities lay the framework for forming the corresponding budgets; however, in practice these documents (program and budget) are extremely poorly integrated, at the regional as well as the local levels. This shortcoming is demonstrated by the fact that in some *oblasts* (for example, in Volyn), this year's local budgets were formed before the corresponding socioeconomic development programs were created. The main reason is that, in practice, budgets depend on allocations of funds from higher levels of government, whereas socioeconomic development plans tend to be formal documents simply meeting required reporting responsibilities.

As *oblast* and *rayon* local councils represent the common interests of the territorial communities of villages, towns, and cities, when creating socioeconomic development programs (annual, mid-term, or long-term), planners use statistical information from both the regional and local levels. Such programs are financed with funds from different local budgets that are accumulated in *oblast* (and *rayon*) budgets.

Usually, drafts of socioeconomic development programs are based on the available statistical information reflecting the dynamics of a large number of indicators that characterize changes in different spheres of life across the given territory. The list of indicators does not significantly differ from the set of indicators that existed during Soviet times. The main characteristic feature of such statistics is the large emphasis on gross indicators that characterize production (both industrial and agricultural), construction, and the consumer market.

Changes in the social sphere are still measured by quantitative indicators of the number of public institutions put into operation. Indicators of gross value added are virtually not used, as they are calculated at the *oblast* level with a delay.

Statistics do not exist on the conditions and dynamics of access of regional populations to modern methods of information exchange or on the development of a modern regional technical and social infrastructure. Only limited statistics are available regarding the access of regional

populations to clean drinking water, uncontaminated food products, and other such information that is used by local government bodies of industrial countries when implementing development policy and boosting regions' investment attractiveness.

Regional authorities lack information on poverty levels or differentiation of the population by incomes and expenditures. The set of indicators on socioeconomic development that could give an idea of existing income disparities within *oblast*s is extremely limited. Such analysis is carried out based only on tax capacity and the official (registered) unemployment rate.

The policymaking of regional and local bodies is also affected by the timeliness and comprehensiveness of existing statistical information. For example, development indicators for small enterprises at the regional and local levels are submitted with a long delay, and thus the activity of these enterprises is not taken into account in indicators assessing ongoing socioeconomic development. Moreover, the number of small enterprises that are registered is vastly different from the number that report to regional and local statistical agencies about their activity.

Information Needed for the Formulation of Local Budgets

The Budget Code hinders the regulation of state budget interaction with local *rayon* budgets. The lack of fiscal information about *rayon* centers, villages, and village settlements does not allow a distinct stipulation of the fiscal responsibilities of budgets at these levels.

The forecasts embodied in local budgets are complicated because

- The delay in the availability from the statistics departments of some information necessary for budget forecasts is too long. For timely budget formulation, all information should be available in April of the year following the reporting year. Some of the data necessary for the budget formulation do not meet this requirement.
- The level of disaggregation is insufficient. For example, the existing statistical reports on the number of employees by accrued wage ranges do not meet the requirements of the budget process.
- A considerable share of statistical information is available only annually. Having quarterly data would allow taking seasonal factors into consideration.
- The problem with incommensurable historical series arises when the methodology of data collection has been changed, but back casts for such series have not been made.
- Statistical data are distorted in relation to statistical coverage. For example, the location of regionally shared enterprises, like railways or power structures, in the territory of a region requires the statistical department of this specific territory to register the number of employees in the enterprise as a whole. This distortion results in an overestimation of employment and an overestimation of calculated personal income tax on the basis of this biased statistical data. To help prevent revenue overestimation from biased data, the financial bodies of local state administrations could use data from the labor remuneration fund or information received from other sources, for example, from extrabudgetary funds.
- Reliable and high-quality statistics on tax exemptions granted and delays in tax payments and down payments on taxes due are lacking. A considerable share of local budgets' revenues is formed on the basis of national taxes (for example, personal income tax is one of the main revenue sources for local budgets), yet decisions on granting tax exemptions are made at the central level.

Cooperation between the financial departments of local state administrations at all levels and local tax administrations and statistics departments is limited to the regular provision of the limited quantity of officially reported data. To obtain more comprehensive data or new indexes, users must make official requests, which usually are responded to within a month.

Some portion of the necessary information is received by request from *oblast* financial departments from *rayon*, town, and village financial bodies. In many cases local financial bodies compensate for missing fiscal statistical data with so-called direct calculation.[3]

As a rule, the forecast financial resources do not meet the scope of responsibilities at the local level. Low revenue coverage of local budget needs together with unsatisfactory control of service delivery at the local level results in local budget deficits. Complete and reliable statistics on the amount and structure of these accounts payable are absent, the data change rapidly, and the comprehensiveness of the coverage is doubtful. The most acute problems are the stock of growing arrears for energy, water, and other utility services. Currently no adequate methodology exists for the development of monthly financial reporting at the local level.

Indicators that characterize the quality of delivered services, for example, utilities, are also lacking. The frequent disconnection of local jurisdictions from energy supply networks and hot water supply lines is not registered in the official statistical data. The quality of water is also not reported.

Monitoring the Impact of Policy Conducted by Regional and Local Government Authorities

As a rule, when assessing their own work local governments use

- Growth rate indicators of industrial and agricultural production
- Reduction of wage arrears
- Number of constructed public institutions, inhabited localities with installed gas supply, and so forth.

The problem lies in the absence of analysis about the effectiveness of expenditures when conducting the policy (did the expenditures actually make a difference compared with the nonspending alternative?). Analysis of the impacts of local government policy in the mid- and long-term for the population and for local budgets is also lacking.

Above all, this lack of analysis applies to changes in the structure of the economy. This structural change includes the emergence of new sectors that are competitive in interregional and foreign markets, the emergence of high-tech production and its share in the exports of the economic entities located in the territory, the enhancement of the quality of goods and services produced and their compliance with world standards, and the use of technological innovations.

The statistical information regarding the formation of an infrastructure for developing the goods and services market at the regional level is scanty. The activities of institutions, such as regional market agencies, stock markets, capital and credit resources markets in regional cross-sections, or of institutions supporting small- and medium-size business development, virtually escape notice.

Access to Information for Government Authorities and the Population

At both the regional and national levels, an informational disunity is apparent among government agencies that leaves almost no opportunity for local state administrations and local self-government bodies to obtain information with the proper level of disaggregation. Citizens can find statistical information in official articles in regional and local mass media, which publish it in

3. Direct calculation is used when aggregated data are not available. For example, if there are no aggregated data on the number of pupils in a particular city or *rayon,* financial departments contact each school or corresponding territory to obtain actual numbers.

the aggregate, as well as in public libraries, in annual statistics journals, and on the Internet sites of government agencies. Public access to statistical information is restricted because of the poor development of informational infrastructure at the *rayon*, town, and village levels.

Further reforms in local governance and finance require a proper information base. The current situation with subnational statistics, however, does not meet the needs of the policymaking process at the regional level.

Impediments to Subnational Statistics

Sound and efficient public policy directed toward poverty reduction is impossible without the coordinated efforts of all levels of government. In that respect, precise and reliable information, especially at a subnational level, plays a crucial role in the elaboration of a balanced set of policy measures that aims to affect poverty. At the same time, it permits monitoring the outcomes of policy implementation. However, the existing situation with subnational data does not satisfy either users or producers of data.

Main Problems of Subnational Statistics

As a result of analysis of main data users' needs and the capacity of subnational data producers, the main impediments facing subnational statistics were defined. The results of the analyses were presented and discussed at the seminar attended by representatives of main offices and regional departments of the State Statistics Committee, the Ministry of Economy, the Ministry of Finance, and Ukrainian and foreign experts.

Poor Communication between Main Data Users and Data Producers

The procedure to incorporate users' requirements into the plan of activities for the State Statistics Committee formally exists. Unfortunately, in practice the implementation of the system of communication between data users and data producers does not allow for a efficient coordination of the work of the State Statistics Committee, especially in the area of subnational statistics. The reasons include a lack of user feedback and coordinated efforts from the local authorities' side, as well as the lack of a well-organized system of work with data users at the local level on the part of the State Statistics Committee.

Mismatch between the Data Available and the Data Required for the Policy Process at the Subnational Level

The system of subnational statistics was created under the planned economy. Most of the indicators that exist at the *oblast*, *rayon*, and municipal levels still reflect the requirements of the former system. Information on industrial and agricultural production across the regions is quite detailed, but data reflecting social and economic development are mostly available only at the *oblast* level, if they are available at all. For regional policy formulation, the central government needs comprehensive indicators aimed at clearly defining a reliable picture of cross-regional differences.

Local government finances are still subject to policy review. The formula approach to the calculation of interbudgetary transfers was introduced only recently and still requires further enhancements. The lack of information at the *rayon* and municipality levels reflecting social, economic, climate, and ecological differences across the different regions and the differences in the costs of public services delivery hinder the development of a transparent and efficient system of local finances.

Nonintegrated, Fragmented, Partially Decentralized Set of Indicators Characterizing Socioeconomic Situation at the Subnational Level

Some data that describe the social and economic situation at the regional level are collected by different government agencies (the State Statistics Committee, the State Tax Administration, the Pension Fund, the Ministry of Ecology, and so forth). A comprehensive database does not exist. To get the necessary information, local authorities have to send their requests to different bodies. Quite often access to administrative information is limited or not regulated.

Tradeoff between Confidentiality of Primary Data and Requirements of Key Users and Officials

The Law on Statistics and the Law on Information protect the confidentiality of primary observations data, but the pressure from key users forces some regional offices to violate legal barriers for the sake of higher-quality monitoring of the economic situation in the given locality. These breaches may include data on large enterprises, key taxpayers, and so forth. Moreover, security-related authorities often require confidential data from census-like surveys, and their requests cannot be rejected because of de facto subordination. These claims often hinder the independence of statistical offices and, thus, may result in the low credibility of statistical authorities with respect to confidentiality and ultimately produce lower-quality data because of underreporting and other problems.

Lack of Financial, Technical, and Human Resources within the State Statistics Committee

The State Committee of Statistics' staff includes about 13,000 employees. Fewer than 500 staff work in the central department, more than 6,000 work in regional statistics departments, and about the same number in local departments. Salaries are lower than in commercial businesses. The education level of the personnel is high, but additional training is required to adapt to the latest developments.

The regional departments do not have enough personal computers. The collection and processing of empirical data, as well as data entry, are not entirely automatic and are mostly performed manually. In the central apparatus, about 65 percent of staff have computers, but this number drops to about 20 percent in the regional branches, depending on the region (table 7.6).

Problems with limited resources are even more pronounced when the inefficient use of existing potential is taken into account. As mentioned earlier, considerable amounts of resources at the subnational level are directed to the creation of data that are almost useless in the policymaking process, both at the central and local levels.

Table 7.6 *Computerization Level*

Regional level	*Number of branches*	*Number of personnel*	*Number of computers*	*Percentage of staff with computers*
State Committee of Statistics	1	About 450	About 280	62
Oblast departments	27	About 6,200	About 1,050	17
Rayon departments	About 600	About 6,100	About 360	6

Source: State Statistics Committee data.

Limitation of Existing Surveys with Respect to Adequate Representation at the Subnational Level

Because of the specifics of the sampling profile, the representation of sample research decreases from the national level to the city level, which makes impossible the use of the results of the sample surveys of households and domestic enterprises at the level of *rayons* and cities.

Key Directions for Regional Statistics Development

To solve the problems of subnational statistics, we propose to undertake the following activities:

- The expansion of the representativeness of sample surveys. The experimental work aimed at increasing sampling representativeness began in 2002.
- The expansion of the level of indicator disaggregation necessary for the development of budgets.
- The development of a system of indicators that characterizes the economic and social state of the regions, the state of natural resources, the conditions of life, and so forth.
- The unification of the format of publications and accounts of the regional and local statistics departments. Unification would improve the opportunities for interregional comparison and the creation of indexes and ratings and would save the costs of duplicating publications.
- The creation of a unified policy of development and revisions of the system of regional indicators.
- The development of indexes of social and economic development that would enable the effective and methodologically objective comparison of the regions, *rayons*, and cities. Such developments would enable local and regional governments to focus on the problems of development of depressed territories and would serve as an instrument of social policy, including poverty reduction.
- Improvement of the feedback system from users, explanation campaigns, and so forth.
- The creation of the database and metadata indicators of regional statistics. This database may include categorization of data across typical usage purposes, key user types, industries, and so forth. A single catalog and comprehensive database of existing indicators should be created.
- The development of measures to increase the technical level of equipment of regional and local departments of statistics aimed at improving their effectiveness by the intensive, as opposed to the extensive, method of development (the increase of personnel workload, and so forth).

Appendix

Table 7A.1 *Value Added Calculated per Resident, by Region, 1996–99*

	1996		*1997*		*1998*		*1999*	
Region	*Effective prices (Hrv)*	*Ratio to average for Ukraine*	*Effective prices (Hrv)*	*Ratio to average for Ukraine*	*Effective prices (Hrv)*	*Ratio to average for Ukraine*	*Effective prices (Hrv)*	*Ratio to average for Ukraine*
Ukraine	1,356	100.0	1,532	100.0	1,647	100.0	2,081	100.0
Autonomous Republic of Crimea	986	72.0	1,124	73.4	1,205	73.1	1,576	75.0
Oblasts								
Cherkasy	1,357	100.0	1,485	96.9	1,526	92.6	1,747	83.9
Chernihiv	1,296	95.0	1,385	90.4	1,475	89.5	1,845	88.7
Chernivtsi	893	66.0	976	63.7	978	59.3	1,142	54.8
Dnipropetrovsk	1,706	125.0	1,858	121.2	2,036	123.6	2,568	123.4
Donetsk	1,646	121.0	1,799	117.4	1,952	118.5	2,552	122.6
Ivano-Frankivsk	1,012	74.0	1,092	71.2	1,216	73.8	1,583	76.0
Kharkiv	1,410	104.0	1,610	105.1	1,763	107.0	2,180	104.7
Kherson	1,048	77.0	1,288	87.1	1,271	77.1	1,507	72.4
Khmelnytsk	1,233	90.9	1,347	87.9	1,371	83.2	1,624	78.0
Kirovohrad	1,069	78.0	1,124	73.3	1,190	72.2	1,424	68.0
Kyiv	1,597	117.0	1,751	114.3	1,899	115.3	2,301	110.5
Luhansk	1,253	92.0	1,389	90.6	1,437	87.2	1,885	90.6
Lviv	1,095	80.7	1,141	74.4	1,229	74.6	1,560	74.9
Mykolaiv	1,299	95.0	1,299	84.8	1,425	86.5	1,484	71.3
Odesa	1,371	101.0	1,563	102.0	1,651	100.2	2,136	102.6
Poltava	1,718	126.0	1,936	126.3	2,149	130.4	2,696	129.5
Rivne	1,171	86.0	1,259	82.2	1,338	81.2	1,671	98.0
Sumy	1,364	100.5	1,524	99.4	1,600	97.1	1,876	90.0
Ternopil	930	68.0	980	64.0	1,066	64.7	1,269	60.9
Vinnytsia	1,145	84.0	1,239	80.8	1,326	80.5	1,551	74.0
Volyn	942	69.0	1,024	66.8	1,117	67.8	1,417	68.0
Zakarpatia	723	53.0	796	51.9	884	53.6	1,216	58.0
Zaporizhia	1,821	134.0	2,071	135.1	2,305	139.9	2,955	142.0
Zhytomyr	1,199	88.0	1,249	81.5	1,304	79.1	1,567	75.0
City of Kyiv	1,937	142.8	2,868	187.2	3,146	191.0	4,227	203.1
City of Sevastopol	843	62.0	968	63.2	951	57.7	1,157	55.5

Source: State Statistics Committee.

Table 7A.2 *Income per Capita, by Region, 1997–2000*

	1997		1998		1999		2000	
Region	*Hrv*	*Ratio to average income in Ukraine*	*Hrv*	*Ratio to average income in Ukraine*	*Hrv*	*Ratio to average income in Ukraine*	*Hrv*	*Ratio to average income in Ukraine*
Ukraine	987.6	100.0	1,081.0	100.0	1,239.6	100.0	1,755.7	100.0
Autonomous Republic of Crimea	972.3	94.8	937.4	86.7	1,005.5	81.1	1,333.4	75.9
Oblasts								
Cherkasy	830.5	84.1	828.9	76.7	944.6	76.2	1,263.6	72.0
Chernihiv	825.5	83.5	810.9	74.9	966.8	78.0	1,330.8	75.8
Chernivtsi	549.0	55.6	529.9	49.0	569.2	45.9	842.4	47.9
Dnipropetrovsk	1,353.0	136.9	1,596.7	147.7	1,726.3	139.2	2,454.9	139.8
Donetsk	1,124.2	113.8	1,341.3	124.0	1,575.3	127.1	2,128.1	121.2
Ivano-Frankivsk	591.4	59.9	595.7	55.1	734.0	59.2	1,006.2	57.3
Kharkiv	1,018.6	103.0	1,045.4	97.6	1,331.1	107.4	1,603.9	91.3
Kherson	724.8	73.3	719.5	66.5	804.4	64.9	1,073.8	61.1
Khmelnytsk	691.7	70.0	664.5	61.4	757.1	61.1	1,171.4	66.7
Kirovohrad	704.6	71.3	738.1	68.3	859.8	69.4	1,121.0	63.8
Kyiv	1,010.3	102.3	977.4	90.4	1,105.0	89.1	1,397.4	79.6
Luhansk	898.0	90.9	929.1	85.9	1,088.7	87.8	1,723.9	98.2
Lviv	810.5	82.1	806.3	74.5	1,001.0	80.7	1,256.6	71.5
Mykolaiv	859.6	87.0	921.0	85.2	1,089.9	87.9	1,683.8	95.9
Odesa	853.0	86.4	926.3	85.7	1,081.0	87.1	1,480.0	84.3
Poltava	995.3	100.7	1,048.6	97.0	1,153.7	93.1	1,536.3	87.5
Rivne	719.7	72.8	690.9	63.9	707.5	57.1	1,009.5	57.5
Sumy	792.6	80.2	794.3	73.4	898.8	72.5	1,423.6	81.1
Ternopil	541.7	54.8	513.3	47.5	608.8	49.1	906.8	51.6
Vinnytsia	693.7	70.0	634.5	58.7	800.6	64.6	1,116.8	63.6
Volyn	731.5	74.1	753.9	69.7	832.8	67.2	1,115.1	63.5
Zakarpatia	539.2	54.5	596.7	55.2	726.4	58.6	876.9	49.9
Zaporizhia	1,090.2	110.4	1,230.5	113.8	1,309.8	105.7	1,901.9	108.3
Zhytomyr	838.3	84.9	813.6	75.3	857.4	69.2	1,143.3	65.1
City of Kyiv	2,503.9	253.5	3,318.5	306.9	3,759.1	303.2	6,121.0	348.6
City of Sevastopol	1,302.9	131.8	1,382.9	127.9	1,583.2	127.7	2,062.4	117.4

Source: State Statistics Committee.

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