# The Non-Observed Economy in Georgia

Economic Analysis and Policy Recommendations

# Non-Observed Economy in the Sectors of Construction, Restaurants and Repair Services

Statistical Report
Department of Statistics, Ministry of Economic Development

Team for the preparation of part I:
Report on the Non-Observed Economy in Georgia, Economic Analysis and Policy Recommendations

**Lead author**
Edward Christie, Vienna Institute for International Economic

**Expert**
Erekle Natadze

**Statistics**
Revaz Tsakadze, Head, Macroeconomic Division, Department of Statistics
Levan Gogoberishvili, Chief Specialist, Macroeconomic Division, Department of Statistics

**Project manager**
George Luarsabishvili

Team for the preparation of part II:
Non-Observed Economy in the Sectors of Construction, Restaurants and Repair Services, Statistical Report

**Editor**
Vladimir Magnaradze, Deputy Chairman of the Department of Statistics

**Data Processing & Analysis Team**
Revaz Tsakadze ,Eliso Verulashvli, Levan Gogoberishvili, Gogita Todradze

**Comments and suggestions to be addressed to:**
4, Pekini st, Tbilisi 0115; Tel: 36 72 10 (200, 300, 301); Fax: 36 72 11
Email: info@statistics.gov.ge

Design & Layout Daniela Cristofori

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Tbilisi 2008

**PART I**

# Report on the Non-Observed Economy in Georgia

Economic Analysis and Policy Recommendations

**PART II**

# Non-Observed Economy in the Sectors of Construction, Restaurants and Repair Services

Statistical Report
Department of Statistics, Ministry of Economic Development

# Foreword

I am delighted to present this study on the informal economy in Georgia. This initiative is an integral part of UNDP's ongoing programme aimed at improving the socio-economic situation of the country. It reflects the great importance that UNDP places on enhancing the country's capacity in collecting, analysing and interpreting statistical data to inform decision-makers. It also echoes the attempts of the Georgian government to formalise all sectors of the economy—attempts that have already resulted in some success.

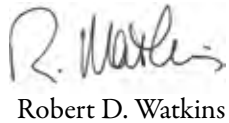
Georgia's strong economic growth in recent years, in combination with policies aimed at reducing corruption and driving down the regulatory and fiscal burden on businesses, has created a number of crucial preconditions for encouraging the formalisation of economic transactions. Latest estimates by the Statistics Department suggest that the share of the informal economy in the overall output of the corporate sector has significantly decreased, from 51% in 2003 to 39% in 2006. Nevertheless, the rate of under-reported economic activity is still relatively high, meaning that much still remains to be done.

Having an accurate picture of the informal economy is essential for obtaining reliable estimates of important economic data relating to GDP, employment, and poverty. It is equally important for introducing and implementing the policies necessary for reducing the size and scope of the informal economy. Considerations of the impact that the informal economy might have on the poor, and what impact the measures aimed at reining it in might have on economically vulnerable populations, bring yet another important dimension to this picture.

The study has drawn on UNDP's national and international expertise in close collaboration with the Statistics Department of the Ministry of Economic Development. It builds on the findings of the survey on the informal economy undertaken by the Statistics Department for three sectors perceived to have the highest rate of unreported commercial transactions – bars and restaurants, repair services and construction.

The study analyses the size, structure, and reasons behind the continuing presence of the informal economy in Georgia as well as the national capacities for reducing it. The study also provides policy recommendations for reducing its size and scope, covering areas such as tax compliance and taxation structure; relations between business and revenue services; resources spent by companies for tax compliance; and capacity building needs in both the public and private sectors.

I would like to thank our partners for their collaboration in this study. I would also like to acknowledge the important work undertaken by the Georgian Statistics Department and reiterate UNDP's commitment to support the government in its efforts to bring the informal economy into the mainstream of economic life in the country.



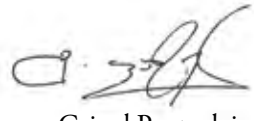
Robert D. Watkins
UNDP Resident Representative in Georgia

Exhaustive coverage of economic production is of paramount importance for conducting an economic analysis of macroeconomic indicators in the national accounts. One of the main challenges in this regard is obtaining an accurate measurement of the so-called "non-observed part of production activities", i.e. that which is missing from regular statistical surveys. The non-observed economy is defined as hidden or informal production activities not covered by regular statistical data collection surveys.

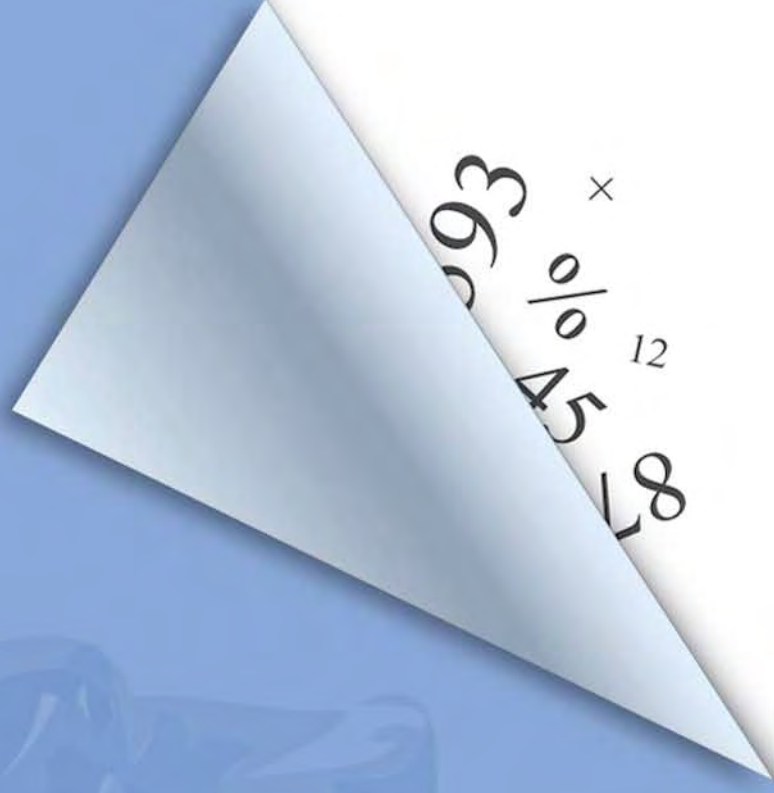
Modern techniques of measuring the non-observed economy imply first and foremost improving the efficiency of data collection. However, even with the most refined techniques, one can improve only so much. Consequently, in order to ensure that the non-observed economy is covered by statistics, a detailed study of economic sectors should be conducted every three or at least every five years. For this purpose, both direct and indirect methods of measurement are applied.

The report presents the methodology used for measuring the non-observed economy, the results of the survey and its analysis. The survey covered the following institutional sectors: financial and non-financial corporations, households and public administration. The survey studied consumption of these institutional sectors in three branches: construction, the restaurant/dining industry and repairs and maintenance.

We would like to express our gratitude to UNDP Georgia for providing support to the survey, which is of utmost importance for the country's national accounts.



Grigol Pantsulaia
Chairman
Department of Statistics
Ministry of Economic Development



# PART I

# Report on the Non-Observed Economy in Georgia

Economic Analysis and Policy Recommendations

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# Executive Summary and Policy Recommendations



Georgia suffers from the fact that a large portion of its economy is non-observed or in other words non-recorded. This notion, although well acknowledged prior to the commencement of this study, was further reaffirmed upon its completion.
The study was initiated upon a request made by the Ministry of Economic Development, and brought about by the uncertainties surrounding the extent and scale of the non-observed economy, and the effectiveness of the mechanisms used by the Statistical office in its assessment of it.

A team was commissioned by UNDP, comprising both international and national experts, in order to delve deeper into these issues in collaboration with the National Accounts Subdivision of the Department of Statistics. The team was additionally tasked with the analysis of the causes and structure of the non-observed economy, and the formulation of policy recommendations on how to reduce its scale and scope.

The goals of this project were as follows:

1. to evaluate and assist the activities carried out at the National Accounts Subdivision of Georgia's Department of Statistics (DS) in determining the estimated scale of the non-observed economy and incorporating these estimates in the officially published output and GDP data.
2. to analyse the structure, evolution and causes of the non-observed economy,
3. to provide recommendations for policies conducive to reducing its size and scope.

The following summary is organized in three sections accordingly.

## Estimates of the size of the Non-Observed Economy in Georgia

**There is widespread and large-scale under-reporting of activity in several sectors of the economy.** The initial unprocessed data obtained from the existing surveys, in particular the business sector, systematically requires major corrective computations in order to arrive at the final estimate of output. For this reason, DS estimates of economic activity heavily rely on estimates of consumption.

Within the scope and limitations of this project, additional consumption estimates were made, with a focus on three branches of activity that were deemed to be particularly problematic: bars and restaurants, repair services and construction. The method employed was to conduct surveys of entities from all institutional sectors with the exception of non-profitable organisations, i.e. households, non-financial corporations, financial corporations and the public sector. In each case enquiries were made on the consumption of services from the above-mentioned three sectors.

**The surveys revealed that the contribution of non-observed activities in the out-**

**put of the construction sector was 32%; repair services 94%; and 87% in the case of bars and restaurants.** The previous estimates of non-observed activities in the same industries were recorded at 49%, 91% and 76% respectively. In other words, the results show that the levels of non-observed output in two out of the three sectors are higher than previously estimated, while the estimates for the construction sector are lower than previously estimated.

The results suggest that further efforts are required to ensure the exhaustiveness and accuracy of national accounts. This in turn will result in more accurate estimates of output, GDP and other key economic aggregates.

**The Department of Statistics has the necessary skills for estimating the non-observed economy.** It currently employs, like it has in the past for specific studies in this area, the various methods recommended in the OECD Handbook on Measuring the Non-Observed Economy, which is recognized internationally as the unsurpassed methodological manual in its field. The hand book additionally lays down several methods suitable for transition and developing countries. The people at DS are knowledgeable and well aware of the various studies, assessments and methods and there is a sufficient level of in-house experience in the key areas of expertise required to deal with the specificities of the Georgian economy.

## Analysis of the Non-Observed Economy in Georgia

**The size of the non-observed economy has significantly decreased, with the strongest falls occurring in 2004 and 2006.** As statistics indicate, the share of the non-observed economy in the overall output of the corporate sector was 39% in 2006, compared to 51% in 2003.

**Georgia has experienced strong economic growth, which in combination with appropriate policies to reduce corruption and to drive down the regulatory and fiscal burden on businesses, is a crucial condition for encouraging the formalisation of economic transactions.** Georgia was named the world's top reformer by the World Bank's Doing Business publication in 2006, while further progress and a ranking among the top 25 countries in the world for ease of doing business seems within reach for 2007. Labour market regulations and the tax system have been simplified and made less burdensome for businesses and individuals. Georgia's other economic policies, notably with respect to trade liberalisation and to the choice of priorities for public spending, are in keeping with best practice and provide favourable conditions for the economy to grow further and for the share of the non-observed economy to decrease further.

**More needs to be done to improve compliance for personal income tax and for social security contributions.** Overall, fiscal revenues have risen substantially since the Rose Revolution. In particular, the results for VAT and corporate income tax are impressive and very positive: revenues grew more rapidly than estimated tax base growth every year since the Rose Revolution, indicating a strong rise in tax compliance. The results for personal income tax and especially social security contributions are however less impressive. In both cases there was a very positive change particularly in 2004, which saw improvements in observance resulting in a substantial increase in revenues. However the level of compliance did not continue to grow in a significant way over 2005-2006, although in the case of personal income tax, the revenue growth decelerated in account of shifting to a single low rate of 12%. These results suggest that more needs to be done to improve compliance for personal income tax and social security contributions.

**The proposed reform to merge personal income tax and social security contributions into a new single personal tax at a flat rate of 25% is likely to lead to positive results in terms of compliance.** However, views expressed by certain businesses and analysts suggest that a well-

designed information campaign should accompany the reform so that it is properly understood and put into practice by employers.

**The introduction of a general *non-taxed minimum amount* of income applicable to all individuals, irrespective of their occupation, would be a logical component of Georgia's social policy. This would help to restore equity concerning the treatment of individual employees as compared to individuals involved in categories of small-scale entrepreneurial activities that are currently exempted from taxes.** The principle of equity is an important factor which is taken into consideration in most European personal income tax systems. Furthermore, the absence of equity also creates distortions in the labour market allocation process. Standard economic theory indicates that this should be avoided.

**Georgian businesses are reported to spend, on average, about four times the amount of time on tax-related matters every year than what is spent in certain Western European countries, although those countries have considerably more complex taxation systems.** Evidence gathered from business representatives and analysts indicates that, in spite of the welcome and extensive simplification of the tax code, there are areas of practical difficulty in the revenue declaration process. This finding is also reflected by the fact that businesses spend twice the amount of time every year than what is spent in some of the comparatively less advanced economies of South-eastern Europe such as Romania and Montenegro. This report suggests that this situation results from limitations in both institutional capacity and private (business) capacity.

**Certain businesses declare that it would be desirable to improve the design of revenue declaration forms, and to provide better information materials to taxpayers.** This report proposes that a more detailed assessment of these issues should be made, preferably in collaboration with both the Revenue Service and business representatives, focusing strictly on the practical issues of declaration and information pertaining to declaration of taxes.

**It is recommended to introduce positive incentives for training in accounting and in legal skills for entrepreneurs and managers of small businesses.** This could help to plug a gap in skills, which would help reduce the amount of management time devoted to tax-related issues.

**Georgia is entering a new phase of its economic development which requires new measures in order to ensure that the full benefit of lower regulatory and fiscal burdens are reflected throughout the economy. This requires new analysis and new focus in order to prepare for future reforms.** The groundwork in terms of *legislative* reforms has mostly been carried out in Georgia. The new issues that now need to be analysed with more intensity are: the quality of Government communication with businesses and the public, the strengthening and consolidation of institutional capacity, judicial practice in litigations involving the Government, and public perceptions and understanding of their social obligations and of the role of the State. Indeed, public opinion surveys confirm that the most acute anxieties of the population centre around the rule of law (whether laws are properly implemented) and the quality of legislation (whether new laws are properly designed). Moreover, although corruption has dropped significantly since 2003, it nonetheless remains at a level that is problematic.

**Additional policies and interventions would be useful, especially in the form of positive incentives to individuals and businesses, in order to accelerate the adaptation process towards a culture of compliance.** Georgia has made substantial and impressive progress both in terms of its formal legislation and in terms of concrete outcomes such as revenue collection and reduction of corruption. Nevertheless, formal changes to legislation, though indispensable, constitute only the initial necessary step in bringing about deep-rooted structural and behavioural change.

## Policy Recommendations for Georgia

### *New Personal Tax*

1. **The new personal tax currently under consideration should incorporate a non-taxable minimum amount.** The income below that amount is not taxed (also known as *tax-free threshold* or the *general income allowance* in certain countries). This non-taxable minimum amount should apply to all individuals, whether employed or self-employed.

2. **Progressively abolish the existing exemptions for certain categories of small-scale entrepreneurial activities (Article 168 j of the current tax code).** The principal argument against the current provisions is the question of equity: why should certain categories of entrepreneurial activity be tax exempted while others are not? Similarly, why should sections of entrepreneurs be exempt from taxes while their counterparts on low salaries are not? A higher non-taxable minimum amount may be applied, as a *transitory measure*, to the entrepreneurs defined under Article 168 j if this is felt to be necessary for the feasibility and/or social policy reasons. This non-taxable minimum amount would then be calibrated in such a way as to leave a large portion of the average income of such entrepreneurs untaxed; however, it should converge over time with the amount applied to employees. Ultimately, individuals with identical personal situations who earn the equivalent income but from different types of activities should pay exactly the equal amount of tax.

3. **Higher non-taxable minimum amounts may be considered for specific categories of individuals,** notably those already considered by the current tax code such as invalids, single mothers or families with multiple children, depending on the preferred priorities of social and demographic policy.

4. **The calculation of the level of the non-taxable minimum amount should be set at around 60% of official estimates of the minimum subsistence level.** This would imply a range of approximately GEL 65-75 per month according to DS estimates and based on the consumer prices of March 2007. The non-taxable minimum amount should be adjusted every year to compensate the effect of consumer price inflation.

5. **For communication purposes, the non-taxable minimum amount should be described to the public as an acknowledgment by the Government that there is a bare minimum income level that is necessary for survival which it chooses not to tax.** Public discourse would thus integrate a debate about solidarity with those having the least earnings. At the same time, the Government would be in a position to expect more from the public in terms of compliance.

6. **Short but precise written information materials should be produced and disseminated to enterprises, explaining how employers should implement the new tax.** The information materials should include numerical examples demonstrating the variations on the firm's accounts and on the employee's take-home pay between the old and the new system.

### *Relations between Businesses and the Revenue Service*

7. **A new consultative body or forum should be created, bringing together representatives from private companies (small, medium and large firms), and representatives from the Revenue Service.** Efforts should be made to ensure strong representation of small businesses. The purpose of this new body would be explicitly restricted to practical issues concerning revenue declaration, such as the design and correct understanding of information materials and declaration forms in addition to the

ways and means for obtaining accurate information from the Revenue Service in instances where the tax code seems unclear to businesses.

8. ***Improvement of Basic Accounting Skills***
**Existing courses and training in accounting skills should be assessed:** Assessments should be made on the appropriateness and affordability of training courses that cater to the needs of entrepreneurs and small businesses. If the result of the assessment indicates that the uptake of necessary skills by entrepreneurs is insufficient, temporary Government intervention could be helpful, for example in the form of subsidies for such training courses in order to accelerate the absorption of necessary skills by entrepreneurs and relevant staff from small businesses. The contents of such courses should include detailed study of the tax code and practical advice on how to prepare comprehensive, fair and accurate declarations of income and expenses to the Revenue Service.

9. ***The Pension System***
**Future individual pension entitlements should depend on the total amount of paid contributions by the individual.** Apart from guaranteeing a minimum pension, this system would allow for higher future entitlements if individual contributions were higher than a certain threshold. This measure would increase the incentive for employees to ensure that their salaries are correctly declared and taxed.

10. **Individual taxpayers could benefit from a tax reduction if they make additional voluntary contributions into private pension schemes and/or in long-term savings mechanisms offered by the financial sector, within limits defined by law.** For example in the case of an employee: the employer would declare (and provide the necessary documentation for) the employee's contributions to private pension or savings schemes alongside the employee's salary. This measure would also increase the incentive for employees to ensure that their salaries are correctly declared and taxed.

11. **More generally, a detailed analysis of how Georgia could move towards a modern three-pillar pension system (i.e. State pension, corporate pension, private savings) should be undertaken, with particular attention to the tax incentives that could be associated with it, thus providing additional incentives for accurate declaration of salaries.**

# Foreword



This report is made up of two main sections. The first section, called *Review of new statistical estimates of non-observed economy,* gives an overview of the methods and results produced by the Department of Statistics in the field of non-observed economy.

The second section, called *Economic analysis and policy recommendations,* is an economic analysis of the non-observed economy in Georgia. This section is an in-depth study of the factors, causes and evolution of the non-observed economy, according to the most recent statistics available. It also takes a close look at the influence of recent reforms on its development. Finally, possible future reforms are discussed which would be conducive to reducing its size in the coming years

# Review of New Statistical Estimates of Non-Observed Economy



This section begins with a brief explanation of key National accounting concepts and their links to the more prevalent economic concepts. This is followed by the description of the regular work done at the DS in the field of Non-Observed Economy (NOE) estimates, the methodology used for the new estimates and finally an assessment of the main results along with its significance for future work.

Before proceeding with the report, a word on the definition of the main concept; the non-observed economy encompasses all productive economic activity which is initially not observed by the relevant National Statistical Agency. This concept therefore entirely includes the shadow economy (underground production) defined later in this report, as well as the other types of non-observed production activities (informal sector production, production of households for own final use and illegal production[1]). In addition the NOE includes the share of output which is overlooked for purely statistical reasons, e.g. incomplete coverage of productive units.

## National Accounting Concepts and Their Link to Economic Variables

From an economic point of view, one of the most important measurements that is derived from the national accounts is Gross Domestic Product (GDP). But what is it exactly[2], and how is it usually measured? GDP is the sum of the gross values added of all resident producers. Gross value added in turn is equal to the value of output (e.g. sales turnover of a business) minus the value of intermediate consumption (the cost of the goods and services consumed by the business as part of the production process). Gross value added is then used to remunerate the factors of production, i.e. labour (salaries) and capital (e.g. depreciation), and what is left over constitutes the profit made by the business.

These concepts may sound simple, but it is important to stress their implication, notably in terms of what GDP does *not* include. In particular, because GDP is a domestic concept (only resident producers are included), it does not include value added created by its citizens working abroad, for example workers that have emigrated. If these workers send money to their relatives in their home country, i.e. remittances, these flows certainly boost the level of *household* income in the home country, but not necessarily the level of GDP[3], unless that additional *income* is used primarily to purchase goods and services produced in the home country. The same applies to other transfers such as international aid. Poverty may be reduced and living standards may rise due to such transfers, however actual production, and the corresponding GDP, will not necessarily rise in the same proportion. One indirect measure of this phenomenon is given by the ratio of household consumption to GDP, which in Georgia according to preliminary data for 2006 was at 74%. Similar values were observed for instance in Romania and Bulgaria during the second half of the 1990s, at a time when GDP per capita levels in both countries were very low by European

[1] Official definitions for the relevant types of activities are found in OECD (2002).
[2] This section uses slightly simplified definitions and notations in order to make the text accessible to readers not familiar with statistical terminology. Complete official definitions are however available online from the United Nations Statistics Division at *http://unstats.un.org/unsd/sna1993/glossary.asp*
[3] Here only the pure accounting effect is considered. In a dynamic setting it is clear that remittances and foreign aid can – if certain conditions are met – contribute to improving GDP growth prospects.

standards (in Bulgaria in a range of 900 to 1500 Euros per capita) and much remained to be done in terms of economic development. In contrast, that same ratio is generally in the 50%-60% range for Western European countries. In any case, it should be borne in mind that there is a difference between *average income* and *GDP per capita*.

How should GDP be measured? The National Accounts System, which is governed by standards set by the United Nations (SNA 1993), is an accounting system in which specific sums of items must balance following a number of identity relations, which are true by definition. Therefore GDP is equal to the sum of gross values added of resident producers as mentioned above (the output approach), it is also equal (to simplify) to salaries plus gross profits (the income approach), and it is also equal to final consumption of households and government plus gross investment plus net exports (the expenditure approach).

A national accounts division in any country will therefore strive to estimate all the components of these three approaches and seek to reconcile the total values found, in order to arrive at its final and official estimate of GDP.

There is a standard set of instruments to this end. The most important instrument is the survey of productive units (hereafter the business survey) which leads to estimates of output (production), intermediate consumption, value added, investment, employment, salaries and profits. In itself, a successful business survey enables the calculation of GDP following the output approach and the income approach. This is complemented by the estimate of GDP following the expenditure approach. The latter requires an estimate of household consumption, which relates to the second most important instrument, which is the household expenditure survey (or household budget survey), in addition to estimates of Government consumption (from official reports by Government agencies), of investment (from the business survey) and of net exports of goods and services (from balance of payments statistics which cover international trade).

As can be seen, there are therefore three essential elements: the business survey, the household expenditure survey, and the balance of payments statistics (notably customs data). All is well if businesses accurately report their activities. If they fail to do so, which is always the case to some extent, and more significantly in the case of Georgia and other comparable countries, then the statistical office has a serious problem. This is because the results from the business survey affect all three methods of calculating GDP in a decisive way. In concrete terms, if businesses generally underreport activity, it is most likely that all the key variables will be underestimated, specifically output, value added, employment, salaries, profits and investment.

As a result of this structural constraint *there is no single alternative methodology for estimating GDP which provides satisfactory results*. Instead, the consensus that has emerged among the leading experts of national accounts worldwide – and which is summarised in OECD (2002)[4]– is that a combination of methods must be used. Foremost among the methods that have been used in a number of countries are the *labour input method* and the *commodity flow method*. The labour input method requires an additional survey called the labour force survey, which is carried out in Georgia together with the household expenditure survey. The goal of this survey is to obtain an additional estimate of employment levels. Typically, individuals responding to the labour force survey will be at least as truthful as their employers are when the latter respond to the business survey. Furthermore, if part of the problem with the business survey is an incomplete cover-

[4] This publication, called "Measuring the Non-Observed Economy – A Handbook", is the authoritative manual in the field of measuring concealed economic activity. It was published by the OECD in 2002 as a result of a joint effort by the OECD, the IMF, the ILO and the Interstate Statistical Committee of the CIS (CIS STAT). Staff at Georgia's DS are familiar with its contents and recommendations.

age of existing businesses (either because the overlooked businesses are not registered, or the business registration is not up-to-date, or for other reasons), a further gap between the estimate of employment level from the labour force survey and the level of employment declared by businesses will arise. The labour input method includes taking the additional stock of employment revealed by the labour force survey, but not reflected by the business survey, and multiplying it by an assumed level of output per worker, for example the declared level of output per worker. This is done on a sector-by-sector basis in order to reflect differences in labour productivity between sectors.

The commodity flow method consists in tracking the supply and use of selected commodities throughout the economy, in the hope of uncovering discrepancies which would reveal information about hidden economic activities. The idea here is that production plus net imports of any given commodity must equal the consumption of the same commodity.

## General Approach Used by the DS for Estimating the Non-Observed Economy

The basic data which leads to the initial estimates of economic production (output) by sector is collected from the results of the business survey. This is standard international practice. However the data from the business survey typically understates the true level of activity. This can be seen, e.g., by comparing output levels declared by businesses and consumption levels declared by households in the household budget survey for business activities where households are the main final consumers. Hence, corrective calculations need to be applied to the basic data from the business survey. The question is whether the corrective calculations – in essence a series of corrective multiplicative factors that push up output levels to their final estimated levels – can be justified by the use of other statistical information. Here the DS uses or has used in the past several internationally recognised methods, notably the labour input method and the commodity flow method mentioned earlier. This work is performed on a regular basis by the DS, leading to estimates of the NOE by sector on a quarterly basis. In other words, the work done at the DS is quite comprehensive from a conceptual point of view. The main problem areas for the DS are not so much about the issues of methodology, but the inherent economic situation in the country (i.e. the high prevalence and a wide extent of under-reporting of business activity) and a general lack of funds and resources which leads to sub-optimal sample sizes and incomplete coverage of productive units.

The work already performed at the DS before the commencement of this project therefore enabled the identification of the most problematic economic sectors which required particular attention. Out of these sectors, three were chosen (due to the limited budget of the project) on the basis of uncertainties concerning the reliability of consumption side estimates, compounded by the fact that those sectors also had high corrective factors on output. In such a case, when consumption side estimates are several times higher than the output side estimates, it is clear that the final estimate of output (including the NOE estimate) will be crucially dependent on the quality of the consumption side estimates.

The sectors selected for surveying are shown in table 1. These are "usual suspects" in the field of NOE estimations: construction, repair services as well as bars and restaurants. As we can see, the average corrective factors

**Table 1** Corrective Factors and NOE Shares for 2006, Old Methodology

| NACE | Description | Combined Corrective Factor (NOE as % of Total Output) |
|---|---|---|
| 45 | Construction | 1.97 (49%) |
| 50.2 | Maintenance and repair of motor vehicles | 11.04 (91%) |
| 52.7 | Repair of personal and household goods | |
| 55.3 | Restaurants | 4.20 (76%) |
| 55.4 | Bars | |

Source: Department of Statistics

are fairly high. The corresponding contributions of NOE in total output are shown in brackets. To summarize, 49% of construction output was estimated to have been non-observed, 91% of repair services output was estimated to have been non-observed, and 76% of bars and restaurants output was estimated to have been non-observed.

It was therefore decided to run a series of consumption surveys in order to arrive at more precise estimates. Suggestions for additional efforts for improved estimates of the supply side were discussed in the context of the project. A direct method for estimating the corrective factors was also considered but proved difficult to implement and was thus abandoned.

## Nature of the Survey Results

The surveys that were carried out enabled the assessment of consumption of services from the three selected sectors. This was based on surveys covering all institutional sectors (except non-profit organisations), since all are consumers of such services. Furthermore, in order to ensure complete coverage of consumption, firms belonging to the three selected sectors were surveyed too, as for example a restaurant may use (or produce its own) repair services, or a construction company may use (or produce its own) catering services for its employees. In practice the surveys led to estimations of the following quantities:

As a result, the DS could produce corrected estimates of output and consumption for services from all three sectors covering all institutional sectors apart from non-profit organisations. Given the relatively small magnitude of that sector in Georgia the degree of coverage was therefore very high.

1. the consumption by non-financial corporations (all sectors) of own output of the three selected activities (e.g. a manufacturing company constructing a building for its own use)
2. the consumption by non-financial corporations of purchased services of the three selected branches (e.g. a manufacturing company paying a construction company for constructing a building it will use)[5]
3. As a result of 1) plus 2), an estimate of total consumption of services from the three branches by non-financial corporations
4. expenditure of households on services from the three selected branches (a modified and more targeted form of household budget survey)
5. expenditure of the government sector on services from the three selected branches
6. expenditure of financial corporations on services from the three selected branches

## Estimation Results

The new consumption estimates apply to the calendar year 2006. These are shown in table 2, and compared to the old methodology corrective factors that would have been used at the DS for the 2006 National Accounts, had the new surveys not been carried out.

As can be seen, the corrective factor for repair services is very high but also substantially higher than its old methodology equivalent value. This is an indication of the extent of informality in the activity of that sector and moreover indicates that the business survey data for the given sector merely represents around 6% of the true level of activity. The size of the difference between the two corrective factors indicates that it was indeed necessary and useful to carry out the surveys. The results should therefore prove useful to the DS in its future activities.

The result for bars and restaurants is analogous to what was found for repair services and comes as a strong justification for the execution of future surveys. It also indicates that the extent of informality in that sector is very high: a factor of 7.8 implies that businesses in the sector only declare around 13% of their true level of activity in the context of the business survey.

[5]The only exception here being bars and restaurants which usually do not purchase catering services from other bars and restaurants.

**Table 2** Comparison of Old and New Corrective Factors and Percentage of NOE

| NACE | Description | Old Corrective Factor (Old NOE as % of Total Output) | New Corrective Factor (New NOE as % of total output) |
|---|---|---|---|
| 45 | Construction | 1.97 (49%) | 1.48 (32%) |
| 50.2<br>52.7 | Maintenance and repair of motor vehicles<br>Repair of personal and household goods | 11.04 (91%) | 15.6 (94%) |
| 55.3<br>55.4 | Restaurants<br>Bars | 4.20 (76%) | 7.8 (87%) |

Source: Department of Statistics

In contrast, the findings for the construction sector go in the opposite direction, which may seem surprising. However it should be stressed here that the data shown covers all construction activities, which includes civil engineering projects. In practice, the Government sector accounted for 38% of the construction output in 2006, which drives down the overall extent of non-declared activity in the sector. Moreover a part of construction output could not be covered in the survey, namely that from non-profit organisations (including, for example, church construction), as well as a small percentage of Government construction. Actual values of both total output and non-observed activity are therefore higher than indicated. In the future the DS will make adjustments for the elements that couldn't be covered. This work is in progress.

To conclude, it can be said that the conducted surveys has enabled substantial corrections and improvements to existing work by providing more precise and refined estimates of consumption in particularly sensitive services.

# Economic Analysis and Policy Recommendations



## Introduction

Georgia shares several characteristics with similar small transition economies, in particular those of the former Soviet Union. It is not necessary to re-write Georgia's economic history over the 1990s, this has been carried out extensively elsewhere. The interested reader would find that developments were comparable to those observed in similar countries, i.e. sharp fall in output, painful restructuring, macroeconomic instability initially, followed by macroeconomic stabilisation policies and a resumption of growth based on a less industry-intensive structure.

Significant political and administrative changes were introduced shortly after the Rose Revolution of November 2003. For practical purposes one may therefore view 2004 as the first year under the new regime and, as we shall see in this report, a number of positive developments as well as a clear structural break can be seen if one compares the 2000-2003 period to the 2004-2006 period. As we shall also see, a number of challenges remain. This report will therefore follow two main objectives: first, assess the progress made in the first 3 years following the Rose Revolution in comparison to the preceding period and, second, explore the scope for future developments including further reforms which may be useful in continuing to reduce the size and extent of the shadow economy.

As already described earlier, the shadow economy (underground economy) constitutes a portion of the non-observed economy along with the other types of non-observed productive activities (informal sector production, production of households for own final use and illegal production[6]). For the purposes of this report, we will refer to the phenomenon being studied as the shadow economy. Unless otherwise specified, the shadow economy in this report refers to legal and productive economic activities that are partially or completely concealed from the authorities in order to avoid compliance with taxes and regulations[7].

Most transition countries experienced a strong rise in the share of the shadow economy in total economic activity during the 1990s. In parallel, corruption became an important concern in most transition countries, while policy-makers and analysts alike attempted to analyse and quantify the extent of these problems in order to formulate suitable policy responses that may help to contain and ultimately reduce their extent and impact.

## Consequences of the Shadow Economy

What are the economic effects that result from a large shadow economy? Schneider and Enste (2002) distinguish four main types of effects: (i) allocation effects (which affect competition, growth, public financing of infrastructure projects, labour markets, and the "innovation potential" of the economy as a whole); (ii) distribution effects (underground activities enable supplementary income, but the overall distribution effect is unclear); (iii) stabilisation effects (the non-compliant economy may act as a buffer or as a mitigator of the economic cycle – on the other hand the non-compliant economy may cause the economy as a whole to be incorrectly measured, which may be a problem for policy makers and lead to instability); (iv) fiscal effects (direct revenue losses for the State, although a share of the undeclared income is consumed in the official economy, generating

[6] Official definitions for the relevant types of activities are found in OECD (2002).
[7] The corresponding national accounting expression is underground production as defined in OECD (2002), pp. 37-38.

revenues from consumption taxes). Of these, it is especially the allocation and the fiscal effects that are causes of concern to policy-makers.

Negative allocation effects may arise in practice due to the type of structure of the shadow activity that typically emerges, i.e. small firms find it easier to conceal their activities than large firms. As a result, returns to scale are distorted, potentially leading to sub-optimal (insufficient) concentration of capital, and a scarcity of *new* medium and large firms (the restructuring of existing large firms is a separate issue), while an excessively large number of small and comparatively inefficient firms – which would have otherwise either disappeared or been forced to improve – manage to stay afloat. In addition, firms partly or wholly in the shadow economy to some extent may be able to act as free-riders with respect to public goods.

Loss of fiscal revenue is obviously something that public authorities wish to fight against, though as indicated above, well-administered consumption taxes (i.e. VAT and excise taxes) can go some way towards compensating for the revenue losses at the corporate and individual income taxation levels. On the other hand if the shadow economy is particularly pervasive then the consumption tax revenues will also be strongly reduced.

## Causes and Drivers of the Shadow Economy

At a microeconomic level one can identify two key motivations for individuals to engage in the shadow economy: the *poverty motive* and the *entrepreneurial motive*. In other terms, individuals may engage in the shadow economy as undeclared employees (or declared, but at a lower-than-actual salary) of a firm which may itself be declared or undeclared, or they may be "informal entrepreneurs" in running a business which may be either undeclared or declared, but at a lower-than-actual turnover. The reason why the "informal employee" case is dubbed as a poverty motive is due to its relevance in developing and transition economies. Real incomes are low compared to the real cost of living, so that evading taxation on a significant scale can make the difference between being below or being above the poverty line. By implication, low real incomes are thus thought to encourage a much higher prevalence of non-compliance, than what would be found in wealthier countries, even if one were to control for standard policy variables, such as the probability of detection by the authorities and the severity of the corresponding fines.

In this context, one finds evidence of both the poverty and the entrepreneurial motives in Georgia. According to DS estimates, roughly a third of Georgia's population live below the poverty line. This is a large proportion, and suggests that one should find significant undeclared economic activity in the country. The policy implication of this finding is that one should seek to reduce the tax and regulatory burden for the poorest third of Georgia's population, in order to increase their incentive to engage in declared economic activities. As for the entrepreneurial motive, there is a large share of entrepreneurial activity in Georgia, whether formal or informal. According to DS estimates (first quarter of 2006), around 64% of Georgia's employed population is self-employed. This is a very high proportion by European standards. However it is not uncommon for small low-income countries and in this case the structure is somewhat reminiscent of countries such as Albania. With reference to the concept of matchable incomes presented in Bloomquist (2003), one may assume that there are many entrepreneurial activities that can quite easily be partially concealed from the authorities, e.g. self-employed barbers, translators and repair-workers for personal goods, especially if they are home-based. In this case, the policy implication would also be to lower the tax and regulatory burden.

This has been done to some extent in Georgia's tax code, as there are a number of special tax exemptions (in personal income tax) for specific types of entrepreneurial ac-

tivities if they are below a certain scale. The measures (Article 168 j of the current tax code) are therefore pragmatic and seek to exclude some of these activities from the tax base. However this raises other issues, in particular equity issues. Why should certain types of entrepreneurial activities (below a certain scale threshold) be exempted from income tax while others are not? And why should two individuals with identical personal situations and earn the same amount of income but from different activities be treated so differently? For example, why should a translator working as an employee in a large company pay income tax while another translator earning the same amount but who is self-employed pay no income tax at all? In other terms, the current arrangements are questionable on equity grounds. They are also questionable on general economic policy grounds, as the current system creates distortions in labour market allocation by asymmetrically modifying market wages. For both reasons the existing provisions should therefore be phased out, if this is feasible in practice.

How do these two considerations come together? Essentially we find that Georgia's legal provisions on personal income tax fail to take into consideration the poverty motive. At the same time, the tax code offers an imperfect and partial treatment of the entrepreneurial motive. Could something be done which would give a more satisfactory treatment to both issues? Georgia's income tax is exceptional by international standards, not because it is a "flat tax" with a low rate (such systems are now common among transition countries), but because there is no general *non-taxed minimum amount* of income[8] which is exempted from tax for all taxpayers. The *non-taxed minimum amount* of income is the amount of income which is exempt from personal income tax in all cases. For example, if that amount were to be GEL 40 per month in Georgia, then a person earning GEL 200 per month would pay tax on only GEL 160 per month. Assuming a tax rate of 25%, that person would pay GEL 40 in tax per month. A person earning GEL 60 per month would pay GEL 5 in tax per month, while a person earning GEL 40 per month or less would pay no tax at all. The overwhelming majority of countries in the world have such a provision.

The absence of a general non-taxed minimum amount means that both the marginal and the average tax rate is the same regardless of the level of income. This has two main consequences: first of all it means that the marginal disincentive to declare one's income is identical at all income levels, thus ignoring the existence of the poverty motive. Secondly there is no progression and thus no *relative income redistribution* effect from personal income tax, unlike what is found in most countries.

As suggested by several authors using different sets of data and/or different theoretical frameworks, this is problematic both with respect to tax compliance and with respect to social policy objectives. Bird and Zolt (2005) recommend that one should "untax the poor", i.e. subject the poorest section of the population to much lower tax burdens in order to alleviate poverty. Bloomquist (2003) shows that income inequality is positively correlated with tax evasion due to higher tax evasion rates of both the very poor and the very rich in the society. In the same vein, Christie and Holzner (2006) summarises the possible theoretical links between income inequality and tax evasion and demonstrates the existence of the relationship on a sample of European countries. Particularly strong evidence is found in the cases of Estonia and Latvia, countries that have a flat tax system with rather low non-taxed minimum amounts. In fact, the evidence from both high and low income countries is that it is not worth even trying to tax the very poor on their income, unless

[8]This concept has different names in different countries. Other equivalent names include tax-free threshold (Australia) and general income allowance (UK). Equivalent concepts include general tax deduction and general tax credit, each of which being calculated in such a way as to have the same effect as a non-taxed minimum amount of income.

one fears that as a fallout the total revenue levels would be very low. Individuals who are struggling to feed themselves or their family will deceive the State at the first opportunity and, if caught, cannot be deterred from deceiving it again to the extent that middle class taxpayers can be deterred. This is because the poorest individuals have much less to lose in relative terms than do middle class individuals. As explained in Bird and Zolt (2005), it is no coincidence that personal income tax is much less successful and much less important in revenue terms compared to VAT in most developing and transition countries, while the opposite is true in advanced economies. The poverty motive means that it is not feasible to get very much out of personal income tax when the average income levels are low as in the case of Georgia.

This discussion naturally leads to the following conclusion: Georgia should consider "untaxing poor people" by introducing a non-taxed minimum amount applicable to all taxpayers. Furthermore, for the purposes of equity and fairness, the same non-taxed minimum amount and the same tax rate should apply to all taxpayers, regardless of their economic status or branch of activity. What should be the level of the non-taxed minimum amount? This is a crucial question: if it is too low, the poverty motive will continue to operate very strongly, driving compliance of the poorest taxpayers to very low levels. If it is too high, the tax base will be severely reduced. In this case, unless there is a tremendous increase in the rate of compliance, total revenues will be lower.

One should expect some reduction in revenues if one introduces a significant non-taxed minimum amount, so that such a reform would not be revenue-neutral in the short-run, however the reform should lead to an improvement in the average rate of compliance. As for the calculation of the level of the non-taxed minimum amount, it should be set in proportion to the subsistence minimum that is estimated and published by the DS. Considering 100% of this level would be too high given the income distribution in Georgia as the narrowing of the tax base would be excessive. In addition, it would then be tempting for employers to under-declare salaries by small amounts so as to reduce tax payments to zero for many of their employees. On the one hand, this would make it difficult for the Revenue Service to identify the true salary levels without detailed analysis. On the other hand, it makes sense from a social policy viewpoint to alleviate the situation of those living in extreme poverty. Therefore a reasonable policy recommendation would be to set the level of the non-taxed minimum amount at around 60% of the subsistence minimum. Using the DS estimates for the subsistence minimum compatible with the consumer prices of March 2007, this would result in a non-taxed minimum amount between GEL 65 and GEL 75 per month. This amount should be annualized and revised every year in line with the official estimates of the subsistence minimum, using forecasts for consumer price inflation to set the level for the following year.

To conclude this section, it is important to talk about the prospects for total tax revenues. The goal of the recommendations of this report is to help improve tax compliance. As for revenue levels, it is better to have a relatively high non-taxed minimum amount together with a slightly higher tax rate, than to have a lower tax rate with a non-taxed minimum amount which it too low, or non-existent.

### *Tax Rates and Enforcement*

One additional way of supporting higher tax compliance (lower tax evasion) could be to strengthen the enforcement side. This leads us to discussing the role of tax rate levels, the frequency of tax audits and the level of fines imposed on evaders.

The seminal article in the theory of tax evasion is in Allingham and Sandmo (1972) which presents a simple partial equilibrium model of tax compliance based on an individual maximising his expected income. The

core variables that influence compliance levels in that context are: 1. the probability of being audited by the tax authority[9], 2. the level of penalty imposed on tax evaders, 3. the level of tax rate, and 4. the individual's income level. The policy implications from Allingham and Sandmo (1972) are thus quite simple: in order to improve compliance one should increase the probability of audits, and/or increase the level of fines, and/or decrease tax rates. An additional element which is not explicitly included in the theoretical model is the role of institutional capacity, notably practical administrative arrangements such as having an efficient and up-to-date computerised registry of taxpayers and a sufficient number of well-trained employees to operate it. According to the information gathered in the course of this research, these aspects have been considerably improved in Georgia in recent years.

If we take the elements above and combine them with the discussion on the introduction of a non-taxed minimum amount in Georgia, we will find that the introduction of a non-taxed minimum amount should result in an improvement in compliance since it is equivalent to a reduction in the average effective tax rate. This effect may be strengthened if the probability of audits is raised, and/or if the level of penalties imposed on tax evaders (on the individual taxpayer in the case of personal income tax) is raised. An additional measure could therefore be to signal to individual taxpayers (through a public information campaign) that, while the authorities recognise the problem of poverty in the country and actively seek to reduce it using the tax system (among other measures), the authorities also expect the level compliance to rise significantly in return. In such a context it would then seem easier to increase the level of fines on tax evaders/offenders.

More recent research efforts on tax evasion, as summarised e.g. in Sandmo (2004), point to a gap, *in Western countries*, between empirically observed compliance behaviour and what calibrated versions of the classical model predict. Sandmo (2004) cites a number of possible modifications to the classical model which have been proposed over the years. One issue is that of subjective probability of assessments and the lack of information on the part of taxpayers about the actual probability of being audited. In other words, in the case of Western countries, one would argue that taxpayers overestimate the risk of being detected. However, such a modification seems insufficient, as well as not being easy to justify theoretically, since expected income maximising agents would be expected to steadily adapt their probability to assessment over successive periods. Sandmo (2004) concedes, therefore, that further modifications to the classical model would make sense, and suggests a "guilt factor" as a corrective measure to the taxpayer's utility function. This notion is attached to the models from the "social contract" school of thought, which brings in a number of additional factors that could be considered influential in compliance decisions.

Andreoni et al. (1998) proposes a typology made up of four moral or social elements: *guilt, shame, fairness and satisfaction*. Here we should add the fifth, which is *trust*.

*Guilt* is experienced by the taxpayer at the moment of declaration, in the expectation of free-riding public services while others have to pay; *shame* is felt by the taxpayer in anticipation of the possibility of being detected and punished by the authorities. Both of these sentiments contribute to lowering tax evasion. The *fairness* of the tax burden as perceived by the taxpayer relates to how an individual taxpayer feels he is being treated when compared to other taxpayers in similar situations. This is a particularly relevant

[9]In the context of such models the assumption which is generally made, as in Allingham and Sandmo (1972), is that only a fraction of taxpayers are subject to one could call a thorough audit (while the others are only subject to routine checks which are assumed to be wholly inefficient), and that such a thorough audit detects tax evasion with certainty. Reality is of course more complex, but these simplifying assumptions are mathematically convenient and do not lead to a loss of generality of the results. However calibration must of course be made accordingly.

problem if evasion is wide-spread, i.e. if the taxpayer has a feeling of being treated unfairly by paying the full amount with the knowledge that other taxpayers do not, and may subsequently feel emboldened enough to evade taxes himself. The degree of *satisfaction* with Public Services and the Government in general, i.e. whether the taxpayer believes that his tax payments are put to good use by the Government, contributes to lowering tax evasion. However one may add a refinement to this concept by adding the notion of trust, thus decomposing the perception taxpayers have of their Government into two components: *satisfaction* with respect to the competence and adequacy of Government expenditure policies (e.g. whether the budget has the correct priorities, whether the money is "well spent" and not wasted); and *trust* felt towards the Government, in particular what taxpayers perceive about the integrity and the intentions of the Government as well as its officials. This additional distinction is useful in the context of a lower-middle income country such as Georgia, in particular given the high level of corruption that was prevalent before the Rose Revolution. However it should be said that trust in Government is a slippery concept. Some degree of scepticism with respect to Government is healthy and part of democratic life – a reflection of a vibrant civil society and of a necessary, although informal, information feedback mechanism outside the process of election. A declared lack of trust on the part of the population towards the Government should therefore always be interpreted cautiously.

All these factors interact with one another and with a number of other variables. Feelings of guilt and shame will tend to be low if trust and satisfaction in the Government is low; though changes in this relationship may be neither linear nor immediate (e.g. after reforms have been introduced).

In the case of Georgia, public approval of Government can further be improved. One common complaint relates to the quality of communication between the Government and the Public. If one goes deeper into this issue, it is clear that there are "growing pains" in Georgian society, as an attempt is being made to transform a society that was used to living without fully formalised taxation and regulation (i.e. culture of informality) to one where taxes and regulations as defined by law must be complied with promptly and systematically, and where bribes and/or concealments are no longer acceptable. Moreover, certain structural features of Georgia's current economic situation notably employment and economic well-being take a long time to improve even with relatively high GDP growth rates. Nevertheless, the Government may consider improving its image among the public by introducing the measure discussed earlier, i.e. the introduction of non-taxed minimum amount. This change to the tax code could be presented to the public as recognition by the Government that it cares about the welfare of the population and endeavours to give a "helping hand" to the most vulnerable in society.

Another related issue is the phenomenon of *unfair tax competition* faced by businesses that comply with taxes when many of their competitors are unlikely to do so, i.e. businesses feel compelled to conceal some of their output because their competitors do likewise. Not doing so would put them at a competitive disadvantage. This phenomenon of *unfair tax competition* overlaps with the notion of *fairness* described earlier, though here it is an objective cost-advantage phenomenon in its own right, besides the additional human dimension of how it is perceived in terms of feelings of fairness. The issue of *unfair tax competition* is addressed in the shadow economy literature, e.g. Schneider and Enste (2002), p.157. It has also been confirmed empirically from business surveys in a number of transition countries as being a problem faced by businesses. On an industry level this phenomenon is very visible from NOE estimates and helps to explain why undeclared activity can become almost the norm in certain sectors of activity. This means that unfair

tax competition will force businesses to partially conceal their income from the Revenue Service if several of their competitors do likewise. The policy suggestion in this case is that a combination of rewards and punishments should be used in order to ensure that a given sector of the economy moves from a situation with a large percentage of unreported activity to a situation with a small percentage of unreported activity. Concretely this means that special measures should be considered on a sector-by-sector basis, with the strongest effort on the most problematic sectors.

Two further issues should be discussed as they have a strong bearing on the shadow economy: regulatory and business environment reforms, and corruption.

The regulatory burden on businesses is identified as the second major reason why businesses may choose to conceal activity. It is cited in the OECD (2002) definition of underground production, which states that it covers activities that are, per se, productive and legal, but that are deliberately concealed in order to avoid (in whole or in part) tax or social security payments, and/or compliance with regulations and/or administrative procedures, e.g. licensing, inspections, reporting, compliance with certain legal standards. The regulatory burden is also identified in the shadow economy literature as one of the causes (alongside the tax burden, notably) that drives the shadow economy. Corruption is also an important phenomenon which tends to be highly correlated with the shadow economy and tax evasion. In particular, corruption can be seen in theoretical terms as a substitute tax (so-called bribe tax), which tax evading firms or individuals pay to corrupt State officials in order to avoid payment of official taxes and the fines that should accompany them. From the point of view of the taxpayer, bribes merely replace taxes and remain a profitable alternative if the level of bribes is lower than the applicable tax and penalty payments. In other words, in the presence of both a large shadow economy and widespread corruption, one finds that businesses may be only slightly better off from a short-term, purely financial, viewpoint, than if they were compliant, while tax revenues, and consequently the State capacity, will be seriously eroded. The fight against corruption must therefore be conducted in parallel with other reforms, notably tax reforms, in order to ensure significant increases in tax revenues. The case of Georgia with respect to both issues is discussed in the section on administrative and regulatory reforms.

### *The Flat Tax Revolution*

An interesting phenomenon in terms of tax reforms has arisen across a large number of transition countries (the wealthier Central European countries being to some extent an exception[10]), which is the introduction of so-called "flat tax" reforms. The Baltic States were the first to opt for such system in the early 1990s, though doing so with relatively high levels for the single rate of income tax. Although these experiences were discussed approvingly in certain quarters, its international impact was very limited. The big change came when Russia reformed its individual income tax system in 2001, switching to a single rate system of a low level (13%), thus considerably bringing down the average effective tax rate, in particular for individuals with high incomes. This was done ostensibly in order to help combat individual tax evasion and the results in terms of increased tax revenues were immediate and trumpeted as a great success. Though some caveats were pointed out by certain academics, e.g. Gaddy and Gale (2005), it is clear that the reform was indeed a success, as revenue growth far outstripped the corresponding growth in personal incomes, as was pointed out in Ivanova, Keen and Klemm (2005).

The Russian experience had an enormous

[10]The Czech Republic, Poland, Hungary and Slovenia being more comparable to Western European countries with regards to their tax systems, while Slovakia and the Baltic States are not.

knock-on effect. In the 6 years since the Russian reform, a flurry of similar initiatives and reforms have taken place in transition countries, for example in Ukraine, Georgia, Kyrgyzstan, Slovakia, Montenegro and Macedonia. It is obvious that all these cases are somewhat different from one another and have different starting points and different likely future prospects. However, they all suffered initially (Slovakia to a lesser degree) from very high levels of concealment, from relatively significant problems with corruption, as well as from depressed levels of economic activity.

The reaction to the wave of "flat tax" reforms has been varied. Traditional European social-democrats tend to view this development with dismay and scepticism, while on the other hand economically liberal individuals and think-tanks are extremely enthusiastic about this development and point to the Russian and Slovak cases as evidence of its success. Economists and analysts covering the region are more interested in the practical aspects. Low tax rates may be a good idea, but such a reform needs to be properly implemented to bring about an actual rise in compliance.

As pointed out in Gaddy and Gale (2005) and in Ivanova, Keen and Klemm (2005), the Russian case is indeed relevant to an extent as it included simultaneous improvements of the Revenue Service's efficiency and consequently a stronger commitment to detecting and tackling tax evasion. In this respect the Russian flat tax reform is precisely the type of reform package that defenders of the neo-classical school of thought (e.g. Allingham-Sandmo 1972 model) would propose, and it seems hard to argue against its merits. However there are a few caveats. First and foremost, tax compliance in general is now widely accepted to be a complex phenomenon which cannot be adequately understood using only the expected income maximisation paradigm. Various factors, notably those mentioned earlier (guilt, shame, fairness, trust and satisfaction of taxpayers), and the extensive research done in the fields of "tax morale" as well as in sociology and political science (notably the concept of social contract and the various theories of the relations between individuals and the state) all matter to some degree. They also interact in ways that are somewhat complex and may be to a certain extent country as well as period specific. It is therefore important to formulate concrete policy formulations that may yield good results, beyond the obvious reduction in the tax burden, which should in principle work in every context if everything else is held constant, and that has already been introduced in many transition countries, Georgia included, in the context of "flat tax" reforms.

In addition, parts of the debate leading to the very idea of the flat tax need to be revisited. The key variable which is the target of flat tax reforms is tax complexity. The motivation for reducing tax complexity is that complexity raises the cost of compliance for the Revenue Service, as well as for taxpayers. In particular, Andreoni et al. (1998) identify two broad types of problems. The tax code may be too detailed, e.g. very lengthy, with a very large number of special cases, or requiring refined knowledge of several legal and accounting concepts. This will drive up the cost of compliance both for taxpayers – who need to invest time and energy in understanding the tax code for their specific purposes, possibly requiring outsourcing to tax experts – and for the Revenue Service itself, which will need to ensure that it has sufficient institutional capacity, sufficient staff and, most of all, adequately trained, skilled and experienced staff. The other potential problem, which is in a sense the opposite problem, though both may co-exist to some degree, is if the tax code is insufficiently detailed, somewhat ambiguous in places, or somewhat vague. This second type of problem will also raise the cost of compliance: taxpayers, even those with the best intentions, will not be sure exactly how to declare their activities. They will require additional information and

clarifications from the Revenue Service, thus putting strain on the Revenue Service's staff, who themselves will have to have a clear understanding – shared by all their front-line advisors – of how to deal with the parts of the tax code that seem ambiguous to taxpayers. Ultimately, the problem of a partly ambiguous or unclear tax code will lead quite literally to agents adopting partially random behaviour.

In both cases, complexity can potentially lead to two types of problems. Revenue Service decisions may drift towards being more discretionary (i.e. less rules-based), while taxpayers may develop various "coping tactics" in the face of complexity, depending on their own risk aversion, i.e. some taxpayers will behave like "gamblers" and try to exploit apparent loopholes as much as possible, while others will be "chilled" and minimise contacts with the Revenue Service as well as efforts to understand the tax code. Apart from these two extremes, the likely effect of complexity in both cases is a rise in the cost of compliance which will adversely affect both taxpayers and the Revenue Service. This increased cost of compliance will in practice correspond to additional working hours devoted to tax matters, and/or additional expenditures on the part of businesses in the case of outsourcing to private tax experts (tax lawyers and consulting firms), while staff at the Revenue Service will need more training time, and will have to spend larger amounts of time processing and understanding requests for information from taxpayers.

The issue of complexity is thus clearly an important one. For a lower-middle income country such as Georgia this issue is potentially more critical than it is for a more advanced economy for two main reasons: constraints with respect to *institutional capacity* (i.e. of the Revenue Service), and constraints with respect to *private capacity* (i.e. of knowledge and understanding of accounting and legal standards on the part of employees in the private sector). The Georgian case, with respect to these issues is discussed in more detail, in the section on taxation from the business point of view.

### *Economic Growth and Related Policies*

When there are very high levels of concealment, one may feel at a loss as to how to switch to a better equilibrium. Many different challenges seem to come together: income levels are low, poverty is widespread, corruption is pervasive, tax revenues are low and public sector remuneration is low. These are typical challenges of lower-middle income transition countries. Clearly, all these problems are interconnected, and things would be considerably easier with higher GDP per capita levels. The question of tackling the shadow economy therefore seems to be inescapably linked to GDP growth prospects, and indeed it is. Cross-country comparisons of the shadow economy systematically find a strong negative association between GDP per capita and the relative size of the shadow economy. In other terms, the richer the country, the smaller the share of shadow economy. It is also the case that the higher income transition countries of Central Europe have all experienced improvements in this regard over the 1995-2005 period. At the microeconomic level this pattern is related to the poverty motive mentioned earlier: there is less objective pressure on an individual taxpayer to evade taxes if his after-tax income is conducive to a decent living standard. In more formal terms, this notion is incorporated in theoretical models by assuming a standard concave utility function, so that the marginal utility of net expected income is decreasing.

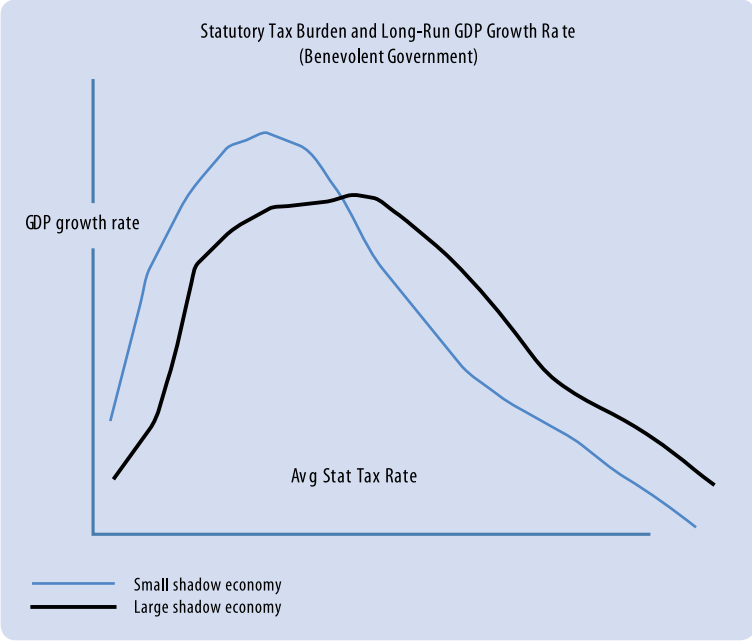
Therefore, while high and sustained GDP growth is in itself the most desirable economic outcome a Government may wish for, GDP growth is a crucial component for successfully reducing the size of the shadow economy. The shadow economy on its own is thought to have a negative impact on the equilibrium GDP growth path due to the allocation problems discussed earlier. The third key variable to enter this relationship is the overall average tax burden, which if set either too

high or too low will adversely affect growth in the long-run, in the former case because of the drag-down effect on incentives to work and invest and in the latter case because of insufficient State capacity for the provision of public goods and services that have positive external effects on the economy, in particular infrastructure, education, basic health and security. The overall relationship is illustrated in Figure 1, which shows the theoretical relationship between the long-run GDP growth rate and the average statutory tax burden in the existence of a large shadow economy as compared to the same relationship with a small shadow economy. The relationships shown assume a benevolent Government that applies an optimal prioritisation of public expenditures.

The key question for the Government is how to shift from the large shadow economy relationship to the small shadow economy relationship in order to obtain a higher growth rate in the long-run. As can be seen from Figure 1, the growth-maximising average statutory tax burden is lower if the shadow economy is small. Furthermore it is clear from the theoretical elements mentioned earlier that a reduction in the tax burden is itself conducive to reducing the size of the shadow economy, with other parameters being equal, e.g. if enforcement is held constant or strengthened. A tax reform of the type introduced in Georgia and in certain other transition countries therefore seems to fit the desired purpose very well, provided corruption is thoroughly tackled in parallel and Government has the correct focus on expenditures. In this respect infrastructure investments (energy, water, transport and communications) and human capital investments (education and training) are crucial for growth prospects, as noted for example in Poot (2000). For this reason, Georgia's budgetary priorities are briefly reviewed in a subsequent section of this report.

Attracting foreign direct investment is also widely recognised as conducive to improving economic conditions. Apart from being associated with capital inflows, it is also associated with transfers of technical skills and managerial know-how which further supports the development of human capital in the recipient country. Furthermore, a favourable business and investment climate for domestic firms is essential. This requires enabling free and undistorted competition, notably by making sure that the necessary administrative and licensing measures constitute as light a burden as possible on businesses. In addition one must make sure that the judicial system enables the enforcement of property rights and provides fair and reasonably swift resolutions of business vs. business and business vs. Government conflicts. Georgia has followed the right policies in most of these areas, as will be explained in subsequent sections of this report.

**Figure 1** Relationship between Long-Run GDP growth and the Tax Burden




Source: Christie (2006)

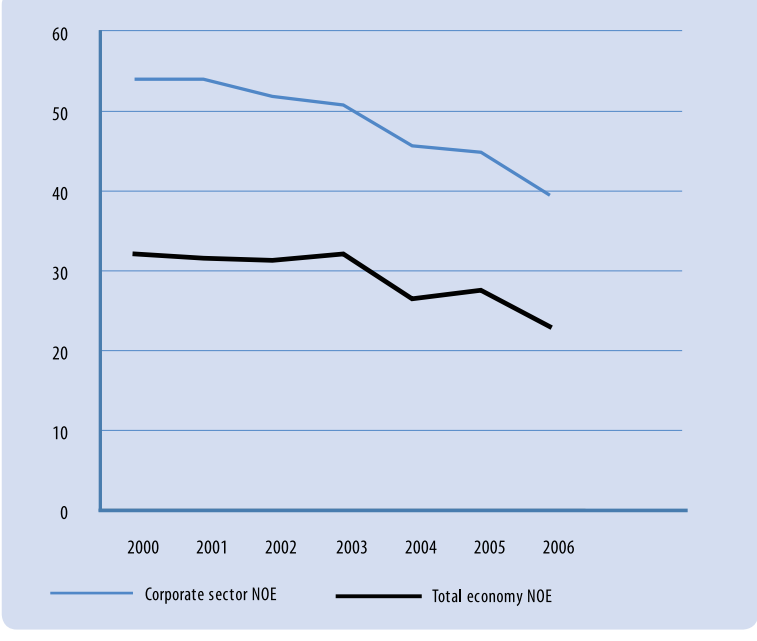
## Structure and Trends of Georgia's Shadow Economy

Henceforth, we will use measures of the non-observed economy (NOE) as produced by the Department of Statistics (DS). As already explained the NOE includes the shadow economy, as well as informal sector produc-

tion, production of households for own final use and illegal production. NOE estimates can therefore be misleading if one is interested in the size of the shadow economy, especially if the coverage of units changes over time. In spite of these caveats, we shall proceed with the official NOE estimates of the DS, as these are the most comprehensive that are currently available.

The other issue to bear in mind is the base of the measurement. The DS produces estimates of the NOE which are very low for agriculture, forestry and fishing sectors. This is primarily due to the fact that informal sector production and production of households for its own final use are simultaneously important and exempted from tax. As a result, many respondents do not have much activity to conceal in the first place. At the same time, this is also a general developmental issue: lower-income countries tend to have large and highly informal agricultural sectors. In any case it makes sense to exclude agriculture, forestry and fishing from the current analysis. Countries of Georgia's development level should focus more on the resources they have in the corporate sector of the economy rather than on households and unincorporated enterprises, since it is the former that truly constitutes the potential for further economic development, while the latter has more to do with basic survival strategies on the part of rural populations and not much to do with high returns and innovativeness.

**Figure 2** **Evolution of the NOE in Georgia, % of output, 2000-2006**




Source: Department of Statistics

For all these reasons put together, it is therefore relevant to look at two overall estimations for the size of the non-observed economy: total non-observed output as a share of total output, and corporate sector non-observed output as a share of total corporate sector output. We restrict our overview to the 2000 to 2006 period for both series of estimations, as shown in figure 2.

As one can see, the NOE is fairly large in Georgia, although it has been on a downward trend since the beginning of the statistical period, with the sharpest falls occurring in 2004 and in 2006. This has thus brought the corporate sector NOE down to less than 40%. This still remains high by international standards, so there clearly remains much progress to be made, though the recent trends are encouraging.

Turning now to the distribution of the NOE by sector of economic activity, we find to some extent a pattern which is familiar from other transition and developing countries. In fact, Georgia exhibited in 2000 a pattern which is reminiscent of the problems encountered especially in the poorest transition countries, e.g. Albania, Moldova and certain Central Asian republics.

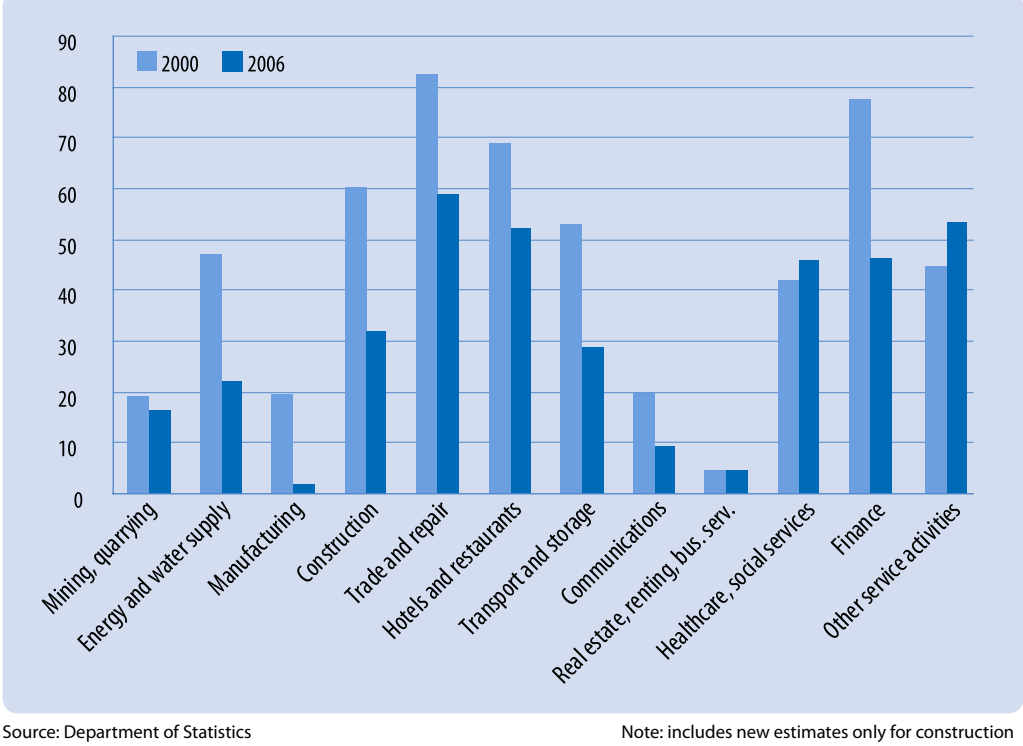
Usually, manufacturing firms are on average bigger in size and have larger capital items than other firms. This should make large-scale concealment of activity more difficult. On the other hand there are "usual suspects" of the shadow economy, i.e. construction, retail trade, hotels and restaurants, because it is easier to conceal income in these activities. This general pattern is confirmed by the Georgian data for the years 2000 and 2006, as shown in figure 3. However the size of the NOE in manufacturing was still very high in 2000 at more than 45%. This has to do with

the comparatively modest scale of most manufacturing activity in the country. On the other hand the results for the mining and quarrying industry along with energy and water supply confirm the general concept that capital-intensive businesses find it difficult to conceal activity. For completely different reasons, financial institutions are also highly compliant, which is a relatively common finding (the opposite finding would be extremely worrying).

Concerning some of the worst cases, the NOE was above 60% in construction, trade and repair, hotels and restaurants, healthcare and social services in 2000. Those levels are high and confirm that Georgia had one of the highest levels of NOE among transition countries[11] in 2000.

What figure 3 also clearly shows apart from confirming the general picture shown in figure 2, is that the NOE has considerably decreased between 2000 and 2006 in almost all sectors, with substantial decrease in some cases The most noticeable improvements have occurred in manufacturing, construction, trade and repair, transport and storage along with healthcare and social services. As a result, there isn't any single broad sector in which the NOE is above 60% of total output. This is certainly a positive development. Nevertheless, the NOE share has increased slightly in two sectors – real estate, rental and business activities, and other services –. Moreover there were still three sectors in 2006 in which the NOE accounted for more than 50% of the total activity (i.e. the non-observed part is larger than the initially observed part), and six sectors in which non-observed output was above 30% of total output. In addition, there are more narrowly-defined sectors of the economy in which the share of NOE is still extremely high, notably repair services. In other words, there remains much to achieve in terms of formalising Georgia's economy.

**Figure 3** NOE in selected sectors, 2000 and 2006, % of total sector output




Source: Department of Statistics

Note: includes new estimates only for construction

[11]One may note in passing that older estimates of the shadow economy per se presented in Schneider and Enste (2002) showed that Georgia had the highest share of shadow economy among CIS countries during the 1990s as well

## Personal Income Tax

Georgia had a typical income tax schedule over the period 2000 to 2004, albeit with a top rate that was low compared to Western European countries. The applicable rates were 12%, 15%, 17% and 20%. Dividends and interest income were taxed separately at a flat rate of 10%. Certain types of incomes were however exempt from taxation, notably in agriculture. There was no general non-taxed minimum amount[12], so, for example, the majority of individuals working part-time in most professions were subject to income tax.

The structure of tax bracketing was transformed into a flat tax rate system, applicable from 2005, with a single and uniform rate of 12%. Dividends and interest income are still taxed at 10%. In addition, the number of tax-exempted incomes has increased, notably in favour of independently managed businesses below certain size thresholds. There is no general non-taxed minimum amount, although the lower end of the tax base has nevertheless been somewhat curtailed due to the larger number of exemptions for small-scale entrepreneurs. This is in fact a very pragmatic approach, as it is unrealistic to try and tax a large percentage of individuals who are at the very bottom of the earnings distribution. Two forces contribute to making such compliance difficult to achieve: the fairly strong poverty motive of persons on the lowest incomes, especially in a lower-middle income country such as Georgia, and the lower share of "matchable incomes[13]" prevalent in that segment of the earnings distribution. The latter is particularly relevant for the small-scale entrepreneurs that benefit from the new exemptions (more so than for employees on very low incomes).

What were the results of changes to personal income tax?

It is unfortunately somewhat difficult to construct a precise estimate of the total tax base for personal income tax in Georgia due to data availability constraints. Therefore estimating personal income tax (PIT) compliance rates, as done for example in Christie and Holzner (2006), would be rather challenging. However, there is one much easier exercise based on the estimated nominal PIT base growth. The easiest exercise would be to check for nominal GDP growth; but this would miss out on a possible structural change in terms of the share of wages and self-employment income in GDP which should be subject to PIT. A more precise assessment can be made as follows: Georgia's household budget survey provides us with an estimate of the structure of household income; assuming households with no savings, one can presume that actual household income is equal to final consumption of households, which is available from national accounts. We can then construct an estimated time series for the PIT base, taking the share of household

**Table 4** Estimated PIT base growth and PIT revenue growth, 2002-2006

| | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|---|---|---|---|---|
| Nominal growth in PIT base | 12% | 8% | 22% | 21% | 32% |
| Nominal growth in PIT revenue | 5% | 7% | 76% | 8% | 33% |

Source: Department of Statistics, Ministry of Finance, own calculations and estimates

[12]Actually there was the possibility of applying for a GEL 9 / month deduction, but it was rarely used due to the administrative burden of applying for it.

[13]Incomes are matchable if they are associated with a trail of documents and administrative controls. The stylised empirical fact is that a smaller share of incomes are matchable for persons on either very low or very high incomes, thus making tax evasion easier and more prevalent for the extreme ends of the income distribution. This concept, together with empirical evidence, is presented in Bloomquist (2003).

income which is reported to arise from wages and self-employment income (agricultural self-employment income being excluded). The advantage of using the final consumption of households as a base is that it has been reconciled by the National Accounts statisticians to fit GDP figures which have been corrected with NOE estimates. The actual level of the PIT base that is estimated in this way may not be very accurate, but its trend over time should be close to the correct trend[14]. The results are shown in table 4.

Our estimates show that PIT revenues shot up by an impressive 76% in 2004, much more than tax base growth which was at 22% in the same year. However 2004 was an exception. Revenues rose less than the tax base prior to the Rose Revolution in both in 2002 and 2003 and, most crucially, also in 2005, where revenues rose by merely 8% while the tax base rose by 21%. However, one should note that the steep rise in revenues of 2004 happened under the old taxation system. Essentially, this was due to a much more efficient revenue collection effort, which included a crackdown on corruption, in particular against bribery of tax inspectors. As for 2005, this was the first year with the new, lower statutory rate, therefore if one assumes that tax compliance was constant between 2004 and 2005, then the 21% growth in the PIT base should have been offset by the reduction in the statutory average rate. A more detailed analysis would be necessary in order to assess whether the compliance rate actually fell in 2005, and if it did so, by how much. Such an analysis would require more comprehensive data on the income distribution, by source of income, of Georgian households. As for 2006, revenues rose just one percentage point over the base, suggesting a very modest but positive improvement in tax compliance.

The general conclusion is that PIT compliance was substantially higher in the 2004 to 2006 period than it was in the 2001 to 2003 period. The secondary conclusion is that almost all the gains in tax compliance were made thanks to the anti-corruption drive of 2004, while the tax reforms of 2005 had a negligible effect on tax compliance.

## Social Security Contributions

Over the 2000-2004 period, employers were subject to a contribution rate of 28% (27% for the main social security fund, 1% for the unemployment insurance fund), while employees were subject to a contribution rate of 1% towards the main social security fund.

From 2005 onwards, employee contributions were abolished, while employers' total contribution rate was reduced to 20%. In other words, the total drop in the gross-to-net earnings wedge fell from 29% to 20%. In itself, such a reform is desirable from the point of view of job creation. One would furthermore expect a positive effect on the compliance rate, but not necessarily on total revenues.

A brief picture of the base and revenue growth is shown in table 5. For the sake of simplicity the estimate for the PIT base was used, the assumption being that the PIT and social security contributions (SSC) base should have a common trend.

According to table 5, the collection of contributions had improved prior to the Rose Revolution, with growth in paid contributions outstripping base growth in 2003. But this was after a disastrous result for 2002. Nevertheless, 2004 remains an

**Table 5** Estimated SSC Base Growth and SSC Growth, 2002-2006

| | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|---|---|---|---|---|
| SSC Base Growth | 12% | 8% | 22% | 21% | 32% |
| Paid SSC Growth | -2% | 38% | 63% | 16% | 17% |

Source: Department of Statistics, Ministry of Finance, own calculations and estimates

[14]One way of making a more refined assessment would be to increase the number of observations by using micro-data (i.e. data on individuals). This would enable proper statistical testing of structural changes.

exceptional year with very strong growth in paid contributions. Comparatively, the rise was much more modest in 2005, and lower than the base growth. However from 2005 the lower total statutory rate was in effect, leading to a fall of almost a third in the expected revenues. Considering these two effects together, it would give the impression that compliance was roughly the same in 2005 as in 2004. In other words, similarly to PIT, large gains in terms of compliance were made in 2004, followed by stagnation in 2005. The same explanation as with PIT is tempting. The really efficient measure was the anti-corruption drive (possibly boosted by more State-friendly public attitude in the wake of the Rose Revolution). On the other hand, the reduction in rates has not led to clear improvements in terms of compliance. As for 2006, the data implies that the compliance rate has gone *down*, which is a negative development and partly at odds with the result on PIT, as one would expect compliance of PIT and SSC to be closely related.

The data suggests that social security requires further attention from the authorities. In this context further reforms are already planned, foreseeing a merging of PIT and SSC into a single total flat rate of 25%, administered by businesses in the case of employees. This imposed linkage between the two taxes should be helpful, as it should make compliance easier to enforce for the Revenue Service. Additionally, the new total rate will be lower than what is currently the total effective rate, giving a further incentive to taxpayers to comply. There are nevertheless two caveats that should be mentioned. First of all, there is anecdotal evidence which suggests that a number of businesses have not correctly understood what the reform actually means: some businesses appear to believe that the reform somehow leads to a higher tax rate. Of course, some of these opinions may be purposefully disingenuous, however it is also likely that a number of small businesses have genuinely misunderstood or misinterpreted the implications of the reforms and the procedures for its implementation. It would therefore be useful to organize a very clear information campaign. This would include materials that explain exactly how the new salaries of employees should be calculated as compared to the previous system.

The other foreseeable problem with the new system, in common with the current PIT and SSC systems, is the lack of a general non-taxed minimum amount. Given Georgia's relatively high percentage of vulnerable households, it seems unusual to try to impose the full tax rate of 25% on the lowest-paid sections of the society.

### Value Added Tax

During the period from 2000 to mid-2005, there was a basic tax rate of 20%, together with a long list of goods and services that were exempted from VAT and a small number of goods and services that benefited from a special rate of 0%.

From July 2005 the basic rate was brought down to 18%. However the number of exempted goods and services was reduced, i.e. the tax base for VAT was broadened. This is in keeping with standard policy recommendations that are usually applicable for transition countries, and therefore clearly a good policy option for Georgia.

How have VAT revenues evolved over the period? As in the case of personal income tax, the goal here is not to provide precise estimates of tax compliance. This would require extensive research efforts and would be a very data-intensive enterprise[15]. It is nevertheless possible to get an idea of what has happened by constructing a simplified estimate of the tax base and looking at its evolution through time and comparing it to the changes in revenues. Taking into account all the exempted types of activities would be rather challeng-

[15]An example of a more detailed approach, with estimates for all EU countries, is provided in Christie and Holzner (2006).

ing. However an approximation can be made using the total gross value added, excluding financial services, education, healthcare and social services, household production for own consumption and agriculture. This simplified approach does not represent the changes that have been made to the list of VAT-exempted activities. The estimated levels are shown in table 6. As before, the levels are not very precise estimates, but the trend of the estimated tax base should be a fair approximation of the trend of the actual tax base. The data for 2006 is based on preliminary gross value added data.

The results point to considerable improvements in the post-Rose Revolution period. While cumulated growth of the tax base was greater over 2002-2003 than the cumulated growth of revenues, the opposite is the case for the 2004-2006 period. In particular, revenue growth has surpassed tax base growth in each of the three years of the second period, and substantially so in 2004 and 2005. These results are clearly very positive.

## Corporate income tax

This is the tax that has changed the least over the period of study. The rate has remained constant at 20%, over the 2000 to 2006 period. However, some modifications were made to the list of exempted profits, essentially leading to a reduction of the number of exemptions, and hence to a slight broadening of the tax base.

An approximation of the trend of the corporate income tax (CIT) base and of revenues is given in table 7. Here the estimate for the tax base is taken as the gross value added of NACE codes C-K, i.e. mining and quarrying, manufacturing, electricity, gas and water supply, construction, trade and repair, hotels and restaurants, transport and storage, communications, financial intermediation and real estate, renting and other business activities. The data for 2006 is based on the preliminary gross value added data. Of course, this approach assumes that the taxable profits are equal to a fixed proportion of gross value added. In the case of corporate tax this is a strong assumption.

**Table 6** Estimated VAT Base Growth and VAT Revenue Growth, 2002-2006

| | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|---|---|---|---|---|
| VAT Base Growth | 16% | 19% | 18% | 17% | 23% |
| VAT Revenue Growth | 16% | 1% | 54% | 57% | 35% |

Source: Department of Statistics, Ministry of Finance, own calculations and estimates

The estimates indicate that the results in 2002 and 2003 were not as bad as those of the three other types of taxes discussed so far. Apparently there were slight improvements in compliance in 2002 and 2003 already. Nevertheless we again notice a quantum leap in revenues in 2004 that outstrips base growth by far, followed by a smaller but clearly positive gain in 2005. The projected data for 2006 shows a spectacular rise in CIT revenues, even larger than in 2004. Overall, it seems that compliance has risen very strongly over the 2004-2006 period. This is excellent news. However it should be mentioned that the estimates made for this case are the least precise of all four types of taxes previously discussed. This is because the relationship between the true tax base and the proxy used in this example is less clear in this case. Nevertheless, the very sharp rise in revenues, and its timing, confirms the general picture found in the other types of taxes.

**Table 7** Estimated CIT Base Growth and CIT Revenue Growth, 2002-2006

| | 2002 | 2003 | 2004 | 2005 | 2006P |
|---|---|---|---|---|---|
| CIT Base Growth | 17% | 20% | 13% | 16% | 18% |
| CIT Revenue Growth | 26% | 23% | 60% | 30% | 62% |

Source: Department of Statistics, Ministry of Finance, own calculations and estimates

[11] A better approach would be to start from net operating surplus (unfortunately not available at the DS) and allow for corrections due to provisions of the tax code.

## Taxation from the Point of View of Business

Businesses have an important responsibility as taxpayers: they are the source of corporate income tax payments; they administer VAT and transfer the revenues to the State. Moreover, they are also responsible for the administration and payment of personal income tax and social security contributions of their employees.

Relations between businesses and the State, in particular with the Revenue Service, are thus the core relationship that affects the shadow economy.

The key question for Georgia, in light of its current legislation and recent reforms, is whether the "tax simplification" debate has been adequately understood and translated into legislation, and whether it has had the desired follow-through effect on the business sector.

Several measures have been proposed to evaluate tax complexity. Attempts to evaluate the complexity of the tax code itself holds relevance for the Government that considers or plans reforms. For example, the total number of words or pages contained in the tax code could be a simple overall measure of complexity. Considering each tax separately, the number of rates, deductions, exemptions, tax credits, along with other indicators, may all provide some estimation of the complexity. In this respect it is clear that Georgia's tax code is not very complex. It contains less than 100 pages in the English-language version and, as briefly explained earlier, the number of different rates, deductions and exemptions is considerably lower than in an average EU country. Qualitatively speaking, the tax code is also not particularly ill-defined. Also, the way the articles inter-relate to each other does not present any severe problems.

Nevertheless, how has this relatively uncomplicated tax code affected taxpayers? What is the actual outcome? To get to these answers, one should try to assess the part of the total tax burden which is not related to the tax payment itself, but to the costs of compliance for taxpayers, e.g. time consumed, in reading and understanding the assessment forms, instructions and legislations, in gathering the required documents, in completing and submitting the forms and documents.

An interesting assessment covering 175 countries is presented in a PricewaterhouseCoopers report: "Paying Taxes – The Global Picture", World Bank (2006). The results are based on surveys of firms conducted in the second quarter of 2006. The data is thus fairly recent and provides an interesting comparative snapshot. The first indicator which captures the attention is the average amount of time businesses spend every year in dealing with taxation. For the sake of convenience, we will refer to this indicator as *compliance time*. The results are immediately striking. Compliance time is very high in a large number of developing and transition countries, especially CIS countries (Russia being a notable exception), but it is much lower in most OECD countries. For example, compliance time is 1120 hours in Armenia, 1000 in Azerbaijan, and 2185 in Ukraine, but only 122 hours in Sweden, 105 in the United Kingdom, 104 in Estonia and 344 in Slovakia. Georgia is in an intermediate position with 423 hours. This is not a bad result. But is it possible for Georgia to obtain a better result?

Most lower-middle income transition countries have high compliance times, but not all of them. Although compliance time is distinctly related to both institutional and private capacity, there are ways of reducing this burden without necessarily being a high income country. Let us consider the case of the relatively low income Balkan countries. Montenegro's compliance time is 208 hours, Macedonia's compliance time is 96 hours, and Romania's compliance time is 198 hours. If these countries are any indication, then Georgia could still introduce a number of improvements, potentially halving the current average compliance time.

If one looks at the composition of the compliance time indicator presented in the

PricewaterhouseCoopers report, one finds that the main reasons for Georgia's ranking are consumption taxes (VAT and excise taxes) and corporate income tax. Labour-related taxes (social security and personal income tax administrating) are not as significant a burden (in international comparison).

This structure makes sense in the Georgian context. It does not mean that VAT law is particularly complex in Georgia. In fact, it is not. However there are practical difficulties that arise for businesses. The main problem is that there are multiple breaks in the VAT-invoicing chains in the economy. This is a classical problem in countries with relatively large shadow economies: even if a business wishes to declare its purchases and sales correctly, it faces difficulties if it is involved with sectors of the economy where informal and underground activities are widespread. A common example of this: what is an ordinary Georgian business supposed to do, if it procures some of its supplies from unregistered shops or traders? This is not an easy problem to solve. Obviously it is tempting for a business to obtain goods from the cheapest available source, and in some cases one of the reasons for the cheaper price may be VAT evasion.

But what are the Government's options? Yet again, in a context of simplified and streamlined procedures and laws, and of healthy GDP growth, the shadow economy should steadily decrease with an increase in the number of business units that register their activities in a proper manner and choose to be on the right side of the law. This trend should be encouraged and if possible accelerated. Concerning VAT compliance, the Revenue Service should remain steady and consistent: businesses must comply with VAT, and therefore should put pressure on their suppliers and business partners, for them to do likewise (or else they should switch to other suppliers and partners). If the Revenue Service falters and allows non-compliance to prevail, then reforms will be totally ineffective. In this respect the Government's initiative to make it mandatory for businesses to acquire and use cash registers in 2006 was clearly the right thing to do, in spite of the protests that it generated. In retrospect, perhaps more could have been done to facilitate or subsidise (on a one-off basis) the purchase of cash registers (using positive incentives). But the basic decision was absolutely correct and necessary. It is true that certain very small business operations became (or are becoming) unprofitable because of the obligation, in effect, to purchase a cash register to comply with VAT. But this is a part of the natural selection process inside a formalised economy. Nevertheless, it could be useful to make an assessment of the penetration ratio of cash registers that has been achieved until now. It is possible that a kind of "final push" is required, to bring some of the remaining unregistered small businesses on board. This could be profitable for everyone concerned, in which case the idea of a one-off subsidy or loan for the purchase of a cash register could be applied.

There are certain problems cited by a number of businesses and analysts alike. In particular, businesses have complained about the declaration forms being difficult to complete, because of three main problems: the forms themselves are not user-friendly, the instructions related to the filling in of the forms are insufficient, and the responses given by the Revenue Service to direct questions about how to fill in the forms are not satisfactory. Businesses have especially argued that the forms are not well designed. In particular, that they are too short, that sections (boxes) should be added to make room for the separate declaration of a number of key expenditures and accounting data, the most sensitive for businesses being those that should lead to calculations of deductions. To be precise, it has been reported that the tax code is sufficiently clear on which expenses are deductible and which are not, but not sufficiently clear about how the corresponding amounts must be actually calculated.

In light of this, businesses would like to have *more comprehensive forms* to fill in, i.e.

ones that contain and reveal the calculations of all the sub-amounts that enter the final tax due. In addition, businesses would also like to have access to clear, well-designed and detailed instructions on how to make declarations in accordance with the law. This information should thus be printed as instructions on the declaration forms, or printed separately and made easily available.

It is obvious that the opinion about the existence of such grey areas may be perceived as being subjective or even perhaps mistaken, in the opinion of knowledgeable staff members of the Revenue Service. But as is typical of such issues, the question is not about the contents or procedures being clear and apparent for experienced Revenue Service staff, but about it being understandable for ordinary businesses. Making declaration forms that are clear and easy to complete is in the interest of the Revenue Service and of businesses alike.

As for the quality of communication with the Revenue Service, complaints have been voiced that answers provided by Revenue Service staff to specific questions are not always reliable, e.g. that different staff members give different answers to the same question. This may be partly due to the fast pace of reforms and the relatively high staff turnover.

To present an objective and detailed assessment of this precise issue is beyond the scope of the current report. However, the individuals interviewed in the context of this analysis – there were several, from different institutions and organisations – did concur towards the view that the problems mentioned above were real. Therefore it appears that a more thorough standardisation of procedures, notably those concerning information for taxpayers and internal dissemination of information, could be profitable for Georgia's Revenue Service. This issue deserves to be analysed more thoroughly. In this context, a useful suggestion would be to involve business representatives in a concrete dialogue on some of the practical issues that arise. It is true that Government agencies may feel sceptical towards such a process initially. Maybe business representatives would try to exploit such a dialogue to press for changes to the tax code itself (e.g. new exemptions and deductions). Such attempts must naturally be resisted. The scope and framework of such a dialogue should be clearly restricted to the strictly practical matters discussed above: the design of the forms, the instructions that accompany them, and the reliability of information produced and disseminated by the Revenue Service.

The other side of the debate is that of private capacity. In a country like Georgia, which for many years has had a culture of informality with respect to taxation, it is clear that a sudden obligation to strictly comply with the taxation law on a systematic basis may not be welcomed by certain individuals and businesses. It inevitably takes time to adapt to the new rules. The question for the Government is whether these anxieties should simply be ignored (the idea being that people will learn and adapt, eventually) and that there are penalties for those who do not wish to participate, or whether the Government should act to accelerate the learning process. Certain additional policies, not necessarily expensive ones, but certainly well-targeted ones, might help to speed up the adaptation process. Such targeted policies should be thought of as being responses to specific structural or market failures that are limited in time (until pure market solutions naturally arise to replace them). Also, if possible, these responses should be based on positive incentives rather than negative ones. In particular, one problem that has been identified by certain Georgian analysts is the shortage in specific skills, notably basic accounting and legal skills. There is no doubt that Georgia possesses highly educated elites and professionals. The issue is more to do with small and micro-businesses and owner-managed firms. Previously, some of these businesses might not have had any kind of internal book-keeping at all, or perhaps very inadequate accounting systems. In this case, a visit by a tax inspector in the

past may have led to the payment of a bribe (and hence no pressure to switch to proper accounting practices). Shifting over to proper accounting practices requires knowledge and an investment of time, and/or the hiring of an accountant. The sudden rise in demand for such skills may lead to bottlenecks and to additional cost pressures on small businesses as the supply of such skills are, for the time being, insufficient. This issue could therefore be explored in more depth, i.e. whether it would be cost-effective for the Government to take stopgap measures to encourage the development and dissemination of core accounting and legal skills for entrepreneurs and businesses.

Special emphasis should be put into organising training courses that would cover the essentials of accounting, knowledge of the tax code and how to correctly make declarations to the Revenue Service (if possible using existing courses and teachers in the relevant fields). These training courses should be available at a subsidised price. The training courses should be concise, short in terms of total duration and focus only on the essentials. More comprehensive training courses would be an option for the participants to decide. The subsidised courses that are suggested here would additionally provide an opportunity for Government to raise the level of awareness about the civic duty and responsibility of the private sector with regards to its tax obligations. The new spirit on the part of the Government would be to not rely solely on the principle of coercion (though penalties for tax evasion should be explained and enforced), but also on the principle of a fair and responsible relationship between the State and the private sector.

### Administrative and Regulatory Reforms

This area has seen significant progress. Georgia has deservingly been hailed as an example of impressive progress over a short period of time in a number of reports and official statements internationally.

There are two international publications which effectively reflect these positive developments. In terms of actual changes to regulations, a useful publication with virtually complete international coverage is the World Bank and IFC (2006), which identifies Georgia as the top reformer *in the world,* over the January 2005 to April 2006 period. The other publication is World Bank (2006), which is a detailed study on corruption in transition countries. Here again, Georgia is singled out as a country that has made very positive progress.

Turning to the details of the results in terms of regulatory and business environment reforms presented in World Bank and IFC (2006), we find that Georgia's international ranking for the overall "ease of doing business" index has skyrocketed from 112$^{th}$ out of 175 countries in January 2005 to 37$^{th}$ out of 175 countries in April 2006. This new ranking places Georgia among the best graded transition countries (excluding the Baltic States that have exceptionally good rankings even by EU standards), i.e. similar to Armenia (34$^{th}$) and Slovakia (36$^{th}$). Certain Western European countries have rankings similar to that of Georgia, e.g. France which is 35$^{th}$ followed by Spain on 39$^{th}$ place.

The index presented in World Bank and IFC (2006) is based on 10 indicators that cover the following areas: starting a business, dealing with licences, employing workers, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and closing a business. The breakdown of the index can provide us with insights about the most and least problematic areas for Georgia. It is noticeable that the individual indicator rankings are somewhat heterogeneous, as shown in table 8.

Employing workers and registering property are the star achievers in the ranking, placing Georgia among the very best countries in the world. The next four policy areas have rankings roughly similar to Georgia's overall ranking. The final four indicators

**Table 8** Ease of Doing Business of Georgia – Ranking of Component Policy Areas

| Policy area | Ranking |
|---|---|
| Employing Workers | 6 |
| Registering Property | 16 |
| Enforcing Contracts | 32 |
| Starting a Business | 36 |
| Dealing with Licenses | 42 |
| Getting Credit | 48 |
| Closing a Business | 86 |
| Trading Across Borders | 95 |
| Paying Taxes | 104 |
| Protecting Investors | 135 |

Source: www.doingbusiness.org; note : 1=best, 175=worst ;

have rather poor rankings by international standards (below the world median) and are therefore areas that may warrant further attention. These are: closing a business, trading across borders, paying taxes and protecting investors. Preliminary estimates of the most recent reforms in Georgia suggest that those areas will see some improvements, and that Georgia's overall ranking may enter the "top 25" worldwide in 2007. This is welcome news.

Concerning Georgia's progress with respect to corruption, and according to World Bank (2006), we find that very impressive progress was made on a number of indicators. There has been a vast improvement compared to 2002, when Georgia was one of the worst countries surveyed according to the joint EBRD-World Bank Business Environment and Enterprise Performance Survey (BEEPS). Close to 40% of Georgian firms indicated that bribery was frequent in 2002, the highest reported share of the whole sample. For 2005 less than 10% of Georgian firms reported that bribery was frequent, depicting the largest improvement in the sample. In terms of rankings, the 2005 situation places Georgia in 3rd best position behind Slovenia and Estonia (but ahead of countries such as Latvia, Hungary or the Czech Republic) out of the 26 transition countries surveyed.

Similar progress was made in terms of the "bribe tax". This is defined as the average amount that firms pay in bribes annually as a share of their revenue. This fell from around 2.7% in 2002 (3rd worst in the sample) down to just under 0.5% in 2005 (4th best in the sample).

The above results refer to all types of bribes put together: they cover not only bribes connected to taxation but also to issues such as licences or other regulations and standards. The case of bribery particularly in the Revenue Service is therefore worth looking at separately, given its importance in the context of tax reforms and in the fight against tax evasion. Here the results are generally similar, and therefore highly encouraging. In 2002 around 40% of Georgian firms reported that bribes to the Revenue Service were frequent (2nd worse in the sample), whereas in 2005 this proportion had fallen to around 10%. The proportions are thus similar to those found for all types of bribery. However Georgia's 14th out of 26 ranking in 2005 for *Revenue Service bribery* is less positive than the overall bribery ranking: i.e. close to the median level of the sample, between Macedonia and Bosnia and Herzegovina. The conclusion is that more could be attempted to improve Georgia's ranking further.

What do other assessments of bribery and corruption indicate? The Economic Freedom Index produced by the Heritage Foundation (USA) is in some ways comparable to the Ease of Doing Business indicator of the World Bank that was discussed earlier. A part of the Economic Freedom Index focuses on corruption as a sub-indicator. The 2007 value estimated for Georgia for that sub-indicator is 23 (out of a maximum of 100), which is rather poor, but a strong improvement compared to the situation in 2003, when the same sub-indicator was at zero. Nevertheless, the sub-indicator level rose from 0 to 24 in 2004 itself. This demonstrates, once again, the very robust and almost immediate improvements that occurred in Georgia as a consequence of

the Rose Revolution. However it is also an indication that progress has stalled somewhat over the 2005-2006 period. Moreover, corruption is still considered to be a critical and significant problem by the general population: almost 70% of respondents of the GCRT (2007) survey of March 2007 claimed that it is a severe problem. Naturally, there is often a time lag between improvements in conditions and public perceptions, so perhaps, the public does not yet fully appreciate or realize the amount of progress actually made. But the data does suggest that it is still a problematic issue.

The conclusion on corruption is that the Georgian authorities were very successful in the initial phase of reforms, especially in the fight against corruption. Then again, the initial gains are always the easiest to make, all the more so if one has a strong political mandate, as was the case with the new post-Rose Revolution administration in 2004. Basically, a large-scale clean-up operation took place, consequently a number of officials were fired, and new faces appeared who could bring a fresh commitment and a new culture to Government institutions, at least initially.

The crucial question here is this: can these achievements be transformed into sustainable outcomes? Corruption still exists due to institutional failures, the lack of incentives to frontline staff, and to issues such as the lack of cohesion within Government agencies. In principle it is not impossible for a country such as Georgia to slowly slide back to the situation of the past, where a high level of corruption prevailed, unless the basic conditions and incentives of the relevant agents are decisively changed. In addition, there are intangible elements such as the existing bureaucratic culture and ethic which, though clearly linked to conditions and inducements, also has a dynamic of its own. For these reasons, it could perhaps be useful to conduct a more detailed assessment of corruption with respect to tax inspectors. This brings about the following set of questions: how high is the current level of corruption of tax inspectors? And is there a need for introducing new measures to bring about improvements? Or are the necessary instruments already in place? If the answers to these questions were to indicate that more needs to be done, then an assessment of the conditions and procedures inside the Revenue Service would be helpful. Such an assessment would analyse the Revenue Service's internal control mechanisms against bribery, the remuneration and other incentives of tax inspectors (not only in terms of total average wage levels, but also with respect to performance-related pay and promotion criteria), as well as qualitative information about the bureaucratic culture and climate within the administration. The scope of the current analysis does not allow an assessment of these areas. However it would be a very useful exercise to carry out in future, given its importance for Georgia's formalisation process.

### The Role of the Justice System

There are three ways in which the justice system can impact the size and development of the shadow economy in theory. The first is if the justice system is very weak and inefficient, for example because of a significant lack of resources and/or qualified staff. This can be so severe that the justice system then fails to win the trust of business and individuals with respect to the processing of disputes of any nature. This mistrust leads to the reduction of gains from using formal contracts and invoices in business-to-business transactions, and thus reduces the gains from formality. Businesses will then prefer to operate underground most of the time.

The second type of problem is bribery of judges. In other words, how easy is it for a private company to bribe a judge in order to obtain rulings in its favour in the context of business vs. business conflicts? If this is a significant problem, then many businesses will avoid formal contracts.

The third type of problem is if the prosecu-

tion is too closely linked and influenced by the Executive Branch (Government). If this is the case, then disputes between private citizens or businesses and the Government or its agencies are not treated in a fair and unbiased manner (i.e. there is a systematic bias in favour of the prosecution). If this bias is particularly strong, then businesses will try to minimise relations with the Government agencies. As a result, they will also not hesitate to exploit every opportunity to deceive the Government.

The first two problems were prevalent in Georgia prior to the Rose Revolution. By many accounts, both problems have been dealt with, to some extent. A number of corrupt judges were removed. In addition, the remuneration of the new and remaining judges were increased to make bribery a less likely phenomenon.

Nevertheless, if the sub-indicator of the Heritage Foundation on protection of property rights for Georgia for 2007 is to be believed (it is only 30th out of 100), then there is plenty of room for further improvement. On this note, most CIS countries also have low scores on this indicator (Armenia, Ukraine, Romania and Bulgaria have the same score as Georgia). However there are certain relatively low-income transition countries, as well as some developing countries, that have better scores (e.g. Moldova, Ghana, and Jordan). This issue would warrant further investigation.

However there is evidence that Georgia suffers most significantly from the third problem. It has been reported by a number of business representatives and analysts that there is a general perception that if a business has a court case against a Government agency, then the business will "always" lose. A more detailed analysis of the justice system would go beyond the scope of this report. However it seems that an assessment of the current situation as well as further reforms could be helpful in certain areas.

## Government Expenditure Priorities

The expenditure aspect is cited briefly in this passage, as it has two indirect impacts on the shadow economy. (1) The impact of the State budget on the level of public satisfaction with their Government: if the public doesn't see tangible improvements to infrastructure, education or healthcare, they will have reservations on the intentions, or the competence, of the authorities (or both). (2) The other impact is that a poorly-prioritised budget, leads to a sub-optimal growth path, which in turn encourages the shadow economy.

What expenditures the State should make is less controversial than what is generally thought. The consensus from economics and political science clearly points to the following: internal and external security (police, justice, and armed forces), infrastructure (transport, energy, communications, water and sewage), human capital (education and training) and basic healthcare. Controversies arise mostly around the size and extent of the social safety net, about extensions beyond basic healthcare, and about the exact boundaries between State and private involvement in certain core areas.

Georgia's budgetary priorities correspond to these conclusions very well. Infrastructure, education and training have been recognised as crucial for the country's development. There is furthermore, a modest attempt at industrial policy in certain areas which seems justified, for example financial incentives to help the tourism industry develop further, given the country's natural – although mostly unexploited – potential in that area. In other words, Georgia's budgetary priorities are those that one would expect and they focus on exactly the right areas. The investments made should help to support the country's growth pattern over the coming years, laying down the foundations for further reductions in the shadow economy and tax evasion, and towards an improved perception of the State on the part of citizens and businesses.

# Conclusions



The main indicators all point in the same direction: Georgia has made substantial and very positive progress since the Rose Revolution. The size of the shadow economy has declined considerably, tax revenues have gone up strongly, and corruption is less severe and less pervasive than it used to be. In parallel, Georgia also experienced robust economic growth, due to a number of reforms in the fiscal and regulatory environments, and a large-scale anti-corruption campaign.

What were the relative successes and failures of the various measures introduced by the new administration? As discussed earlier, VAT and corporate tax are the distinct success stories of the last three and a half years, with revenue growth outstripping tax base growth in 2004, 2005 and 2006. As was also found, personal income tax and social security contributions, especially the latter, had less success. The current reform plans to merge these two types of tax into a single tax of 25% should therefore be welcomed. It is highly likely that such a reform would improve compliance. Nevertheless, in order to ensure a reasonably smooth introduction of the new tax (which should be welcomed by the public, since it is a reduction in the personal tax burden), it is important to provide individuals and especially employers with clear instructions defining how it should be implemented, and how the gross and net wages should be calculated with the new tax, as compared to how they are calculated in the existing system.

The other issue which needs to be discussed with respect to taxation of individuals is the lack of a *non-taxed minimum amount.* Given Georgia's relatively high levels of poverty, the effect of the poverty motive as a thrust behind informal and underground activity remains strong. It is therefore debatable whether the formal attempt to have a very broad base for personal income tax is appropriate. In *almost all* European countries, there is a somewhat generous non-taxable minimum amount that applies to *all* taxpayers. In addition, empirical estimates made in the cases of Estonia and Latvia suggests that the absence of a sufficiently large non-taxed minimum amount is a driver of tax evasion in both countries. Furthermore, some consideration must be given to the *equity implications* of the exemptions granted to a large variety of small-scale entrepreneurial activities, which are a part of current personal income tax legislation. Is it fair that a barber or a secretary is obligated to pay income tax if employed in a medium-sized business, but is not obligated if he/she is operating independently and below a certain threshold? If part of the justification for these provisions is to do with encouraging the emergence of small businesses, then why are certain types of activity exempted of tax while others are not? If part of the justification for these provisions is simply pragmatism (too many low-income individuals depend on those activities, and they cannot realistically be taxed, for whatever reason), then a general non-taxed minimum amount which covers all activities, would still be a better solution. For all these reasons put together, this report therefore

recommends the introduction of a non-taxed minimum amount, applicable to all taxpayers and the abolition of the existing exemptions for specific categories of entrepreneurs.

Corruption is another key issue. Here the Georgian Government was very active and successful, particularly in 2004, and the results were almost immediate, as found in a number of independent studies and business surveys. Nevertheless, corruption has not been completely eradicated and remains problematic (though not threatening, as it used to be in 2003). Although it is inherently a sensitive issue, the Georgian Government should continue its efforts to monitor the situation and take appropriate actions against it.

Several reforms carried out by the Georgian Government have focused on improving the *formal environment* in which businesses operate. This has included the simplification and streamlining of procedures, reducing entry and exit costs of firms and employees, and the reduction in the statutory (official) tax burden. The implicit assumption behind these reforms is the classical economic argument that Government should focus on creating the right conditions for economic development, and then step aside and let individuals and businesses develop. This is generally a sound principle. However structural problems inherited from the past can lead to a sub-optimal economic outcome. The private sector needs to adapt to the new rules, and this comes at a cost. Can the Government accelerate the adaptation process of firms and individuals, without becoming excessively interventionist?

The ability of the private capacity to adapt is as important as institutional capacity. It would therefore be interesting to assess, whether certain targeted measures could give a welcome thrust to the formalisation process, for example by ensuring a sufficient supply of basic legal and accounting skills for small businesses and entrepreneurs. Generally speaking, relations between the private sector and Government agencies, in particular the Revenue Service, are not as cordial as they could be. While nobody expects businesses to cheer at the prospect of paying taxes, there are practical issues that would be worthy of a review, notably the medium and quality of Government agencies communication with the public. In an environment of rapidly evolving legislation, what may seem "perfectly crystal clear" for Government agency officials, may seem obscure to ordinary citizens and business people. For this reason, a number of measures aiming at improving the public's knowledge of the existing legal requirements could be considered. This could include improving the layout and format of revenue declaration forms, the design and content of information materials and the quality and response time when processing information requests from the public. These comments apply to the Revenue Service.

A deeper reflection on the less tangible aspects of the formalisation process would promote favourable results. The question is how individuals and businesses can be encouraged to develop a *culture of compliance* with respect to the law, rather than the *culture of informality* that existed for so long. The experience of Western European countries suggests that there is a lot more to tax compliance than the fear of being caught and penalized by the authorities. In reality, intangible elements such as guilt, shame, perception of fairness, trust and satisfaction with respect to the authorities, all have a role to play. Creating a new culture is a drawn-out and difficult process. In fact, it is a natural process that cannot be entirely controlled. However it is known that this process is greatly facilitated by higher living standards. Nevertheless, the Government can help this process. It can give a signal to the public. The signal is that it takes every individual situation into its consideration. This is already reflected in *some* provisions of the existing personal income tax and would be further facilitated if this report's recommendation of a non-taxed minimum amount is put in place. The Government can also strive to create a general climate, based on recipro-

cal duties and responsibilities, and, in principle, make use of incentives based on rewards rather than on penalties. Such a climate could help individuals to cultivate a feeling of social responsibility and solidarity, rather than conceptualising taxation as a zero-sum game.

Furthermore, there are also purely financial incentives that can be put in place, notably with respect to pension entitlements. In Western economies one usually finds the so-called three-pillar system, i.e. State pension, compulsory or voluntary corporate pension schemes, and individual savings.

An important feature of such systems is the way they interact with the tax structure, in order to provide incentives to individuals, to make contributions of a level that ensures the fiscal sustainability of the pensions system. In the context of lower-middle income countries, the fact, that expectations with respect to pension entitlements are low, is an additional driver for the shadow economy. There are several possible problems. Individuals may believe that they will not receive their pensions at all after retirement. They may fear that payments will be delayed, and/or lower than initially announced or anticipated. If such problems are no longer the norm, the fact that they happened in recent times, e.g. to older relatives and friends in CIS countries, will clearly weaken feelings of trust. In a situation where the trust factor is not a real concern, the level of current pension payments will have a key influence: if it is apparent that elderly pensioners are living in poverty, then a share of the active population may find it more worthwhile to make their own individual arrangements, while avoiding payments into the official pension schemes. In addition, the manner in which pension entitlements are calculated is also of major importance. If the gap between the individual's lifetime contributions and the same individual's average monthly pension after retirement is too wide, the incentive for individuals on higher salaries to conceal part of their income will be high. Based on these conclusions, this report recommends narrowing the gap between the total amount of paid contributions and the level of future pension entitlements.

Broadly speaking, tax incentives can be exploited to encourage higher contribution levels for voluntary pension contributions. In a country such as Georgia, similar tax incentives could also be used for the same purpose, with the added benefit of encouraging a higher declaration rate for salaries in the first place, since the two would be linked for administrative purposes. One way to achieve this would be to introduce tax deductions (an amount that is deducted from the amount of tax the taxpayer is supposed to pay) for taxpayers contributing to individual and/or corporate pension schemes within certain limits. To conclude, further analysis should be undertaken on the possibilities for pension reform in Georgia.

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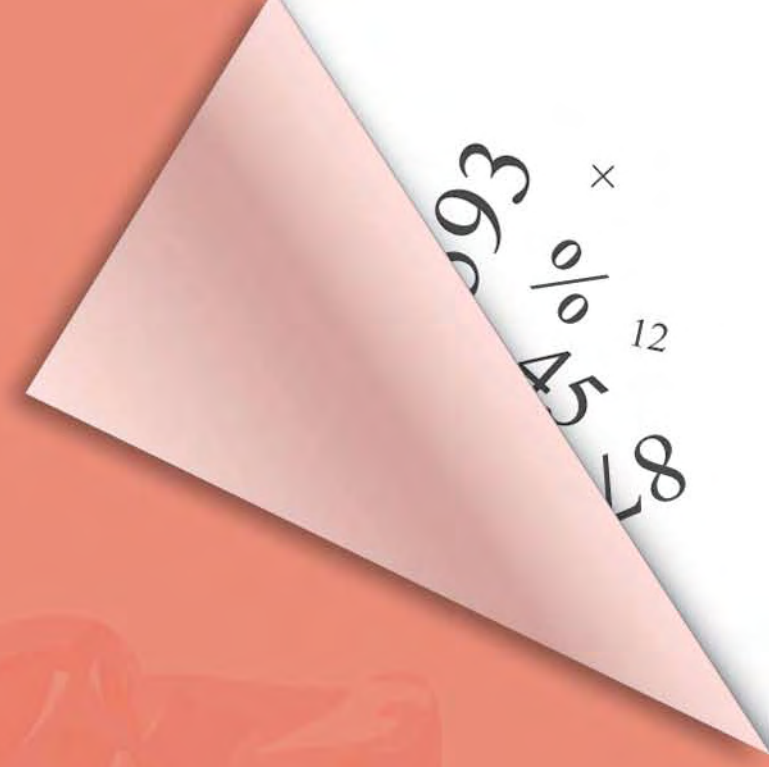

# PART II

# Non-Observed Economy in the Sectors of Construction, Restaurants and Repair Services

Statistical Report, Department of StatisticsMinistry of Economic Development

# PART II Table of contents


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# 1. Introduction

In order to analyze the economic indicators of the country, outline the priority areas in economic policy and carry out proper and targeted planning, it is essential that the results of economic activities undertaken during a given period of time are fully accounted for in the national accounts.

Obtaining an adequate assessment of the so called "Non-observed Economy", which remains beyond the reach of regular statistical investigation and exists as a result of hidden economic activity, represents one of the main problems on the way to achieving the above mentioned goal.



## 1.1. Defining the Notion of Non-Observed Economy (NOE)

"Non-Observed Economy" is a statistical notion which in international economic literature is referred to as the volume of results of activity of a productive character in the informal, hidden and illegal spheres of the economy that is not covered by regular statistical surveys.

This phenomenon to a certain extent exists in all countries, though the level of its development varies greatly.

The definition of the non-registered economy is based on the concepts of the national accounts according to the 1993 version of the National Accounts System (SNA-93) and the methodology outlined in the European System of the National Accounting 1995 version.

Increasing interest towards the NOE has resulted in the appearance of national concepts of its measurement, as well the formulation of the unified guideline document "MANUAL OF THE NON-OBSERVED ECONOMY". This document was elaborated by the largest international financial-economic organizations and experts from the countries with developed statistics institutions.

In order to understand the issue clearly, it is useful to review boundaries of economic production defined by SNA and the categories of the NOE.

SNA-93, currently in force in Georgia, defines the boundaries of economic production and recommends the complete measurement of all types of economic activity within these boundaries and its integration in the Gross Domestic Product.

## 1.2. Production Boundaries

Economic production is defined as activities carried out under the control and responsibility of an institutional entity that uses inputs of labour, capital, goods and services to produce outputs of goods and services.

Such activities as childcare, laundry washing and cleaning of dwellings fall within the boundaries of production, since households frequently hire informal private service providers to carry out these activities.

However, production boundaries do not include household's domestic services produced within a household for one's own consumption (excluding the services rendered by hired work-hands).

According to the SNA-93, the following

falls within the boundaries of production:

Production of all individual or collective goods or services that are supplied to units other than their producers, (or is intended to be so supplied), including the production of goods and services used up in the process of producing such goods or services;

Own-account production of all goods that are retained by their producers for their own final consumption or gross capital formation;

Imputed value of own-account production of housing services by owner-occupiers and of domestic services produced by employing paid domestic staff (housekeepers, yard-keepers, nannies, etc).

### 1.3. Institutional Sectors

An economic entity that owns assets, incurs liabilities, carries out economic activities and engages in transactions with other economic units, represents an institutional unit.

In order to facilitate a precise estimation of the production, consumption, income generation, distribution and redistribution that takes place in the country, SNA envisages the classification of implementers of the economic operations according to institutional sectors

According to the system, institutional units that form the economy are grouped into five mutually exclusive institutional sectors:

1. Non-Financial Corporations;
2. Financial Corporations;
3. Entities of Public Administration
4. Non-Commercial Organizations that Serve Households (NOSH)
5. Households

These institutional sectors are classified into sub-sectors according to the type of ownership or other indicators.

### 1.4. Notions of Informal, Hidden and Illegal Activities

In order to define the NOE and analyze it by institutional sectors, it is necessary to explain the economic meaning of the terms informal activity, hidden (shadow) economy and illegal activity.

According to the "Manual of the Non-Observed Economy" the term "Non-Observed Economy" is referred to as the shortening of the phrase "Types of production activities not covered by the national statistical systems".

"Non-Observed Economy" is defined as the hidden, illegal, informal or any other type of production activity, which is performed within the boundaries of the economic production according to the national system of accounting and is not covered by the regular statistical data collection surveys.

The possible reasons for non-coverage of NOE activities by regular statistical surveys can be on the one hand the provision of incomplete information by registered enterprises or their refusal to provide information, unregistered enterprises, and on the other hand deficiencies in statistical data collection programs, outdated registers and the problematic nature of obtaining responses in cases of informal and, particularly, illegal activity.

Given the importance of the gross domestic product (GDP) within the national accounts, the majority of experts pay particular attention to accurately assessing this indicator. Incomplete estimation of the GDP and its aggregates is inconvenient and troublesome for analysts and economic policy makers, as well as for the experts compiling national accounts.

The rate of the economic growth of the country and the realistic picture of structural changes within the economy is distorted. This leads to imbalances in many articles of the national accounts.

Consequently, it is crucially important that, along with the data of regular statistical surveys, NOE estimates obtained from special purpose surveys and through various methods of indirect estimation are taken into account during the process of compiling national accounts.

# 2. Methodology of Estimating the Non-Observed Economy in the sectors of Construction, Restaurants and Repair Services



Currently the Department of Statistics calculates the total output of these three sectors by activity types based on the results of the quarterly Business Sector Survey.

The Quarterly Business Sector Survey (BSS) is conducted through a sampling method which entails full coverage of large enterprises. Sampling medium and small enterprises ensures representation at the NACE group level. Hence all sampled enterprises have to submit a completed questionnaire (information), which contains various economic indicators (including output) to the Department of Statistics on a quarterly basis

Data obtained through this method usually is not realistic due to several reasons. The main reason is that the entrepreneurs have an interest in reporting underestimated expenditures, as doing so will allow them to pay less in taxes. Accordingly, when possible, they report to the tax inspectors and other public servants the lowest output possible. In this case we have underreporting.

Another important reason for getting lower than realistic total output from the Business Sector Survey is that some enterprises are not registered in the business register. Others try to avoid submitting the quarterly questionnaires to the Department of Statistics. Therefore, products are manufactured in the country but not recorded. Obviously such products will not be covered by the Business Sector Survey. In this case we have incomplete coverage.

Underreporting and incomplete coverage comprise the non-observed economy of the country. The NOE is created as a result of the provision of the incomplete information by the enterprises, unregistered production or nonexistence of enterprises within the business register.

The scale of the NOE differs from one type of activity to another. In some spheres it is high (trade, restaurants, maintenance of vehicles and home appliances, communal, social and individual services – 50-60% according to the previous year's estimate).

NOE is low in the following sectors: mining; generation and distribution of electricity, gas and water; financial intermediaries; communications and postal services. This is due to the specific nature of these sectors. NOE in these sectors is considerably low – less than 10% according to the previous year's estimates.

Overall, the share of the NOE is highly and positively correlated with the scale of informal sector actors' activities.

In order to estimate the scope of the NOE at the macroeconomic level (different types of activities), the commodity flow method is used. This methodology implies the following:

- On the one hand, the supply of commodities is calculated, which includes the total output obtained from regular BSS and import of goods and services.

- On the other hand, the use of these products is calculated, which includes intermediary consumption, final consumption, export and fixed capital formation for the same reporting period.

It should be mentioned that NOE is conceptually non-existent within the sectors of

public administration and non-commercial organizations that serve households.

The majority (more than 90%) of the agricultural output is produced by the informal sector and is partially intended for markets, though mainly for final consumption by households. This sector output is also intended for own-consumption in the process of agricultural activity and intermediary consumption during processing of these products.

Due to the non-commercial character of activity in agricultural sector, the low level of taxation or even tax exemption, entities active in this sector are less inclined to hide the real output. Difficulties in the precise statistical assessment in this sector are more attributed to the non-registering of production and consumption of the products for own use.

The difference between the supply and use of commodity obtained from the balancing of commodity's use and supply represents its non-observed part. This indicator should be used as a corrective factor for total output obtained from the BSS.

This difference will make it possible to estimate the size of the NOE for the particular type of activity.

The figure of the NOE, calculated by the method outlined above, is further verified through the comparative analysis of the labour input estimates from the household survey and BSS statistics.

Finally, the NOE rate for a particular activity is derived by dividing the adjusted rate of the NOE, obtained as a result of the special purpose NOE survey and the above-described methods by the total output figure calculated from the BSS data.

This NOE rate can be used for the compilation of the quarterly national accounts for about 3-5 years. With time the NOE rate becomes outdated and a special purpose survey needs to be conducted in order to update the NOE figure and adjust the previous years' estimates.

It is desirable to conduct an NOE survey by economic activities with a periodicity of, at most, 4-5 years. Carrying out special purpose NOE surveys is associated with financial resources and the time of the qualified personnel. Conducting such surveys regularly is practically impossible.

In order to solve the problem, the following method is used quite effectively: the number of hired employees obtained from the household survey is divided by the number of employees reported by enterprises. As a result, the ratio of incomplete coverage is obtained, which is always more than one, since the number of employees declared by enterprises is always lower than the household-survey based employment figure. This is the method currently exercised to estimate the non-observed economy in different branches.

Obviously this method is less accurate compared to the estimates obtained by the commodity flow method. The thing is that labour efficiency of the employed fluctuates - mainly increasing - and there is no directly proportional linear relation between the number of employed and the volume of the total output.

Therefore, it is necessary to measure, at least to some extent, the NOE for those activities that are left beyond the special purpose surveys using this comparatively accurate method.

The United Nations Development Program (UNDP) has allocated funds for these extremely topical surveys. Special purpose surveys and methodological support of the international experts were financed for the spheres with a potentially high rate of NOE.

Therefore, the NOE survey was conducted for three important sectors not studied earlier from the NOE prospective according to types of activity using the commodity flow method:

1. Construction;
2. Restaurant services;
3. Repair and maintenance of vehicles, repair of home appliances and personal goods, repair of office appliances and equipment.

In order to estimate the size of the NOE – determine the actual volume of services provided by suppliers within the total expenditures for the above mentioned sectors - specialized statistical surveys have been conducted covering all institutional sectors.

In order to estimate the volume of resources and consumption of the output produced in the mentioned sectors the following has been estimated:

- Expenditures incurred for construction and repair of buildings;
- Expenditures incurred for the services of the restaurants;
- Expenditures incurred for the repair of office appliances, vehicles, other equipment of the enterprises;

A On the one hand, total output of the sector of technical services and maintenance was estimated through BSS;

B On the other hand, consumption in the same sector by non-financial corporations, financial corporations, households and the public administration was estimated.

It is noteworthy that total output for maintenance and repairs obtained from BSS includes the total output of the enterprises operating in this sector. In cases when one enterprise repairs vehicles or other equipment by using another enterprise's services, the received service (accrued expenditure) is reflected in the total reported output of both enterprises.

In this situation the total declared output is duplicated at a certain level, i.e. includes its production costs (excluding deductible VAT).

It should also be noted that the market price of the product through intermediary consumption does include costs of products and services used for its production (excluding deductible VAT).

Naturally, this circumstance is taken into account during the estimation of final consumption. Particularly, in addition to the expenditures incurred for the repair and maintenance, enterprises were questioned about expenditures incurred for the services of the repair enterprises. Expenditures incurred for services to repair enterprises should be reflected from the consumption side as well.

This circumstance is not taken into account in the household budget survey, since the output produced by households is not reflected in the BSS.

1. expenditures incurred by enterprises (financial and non-financial corporations) for maintenance and repair;
2. expenditures incurred by enterprises (financial and non-financial corporations) for services of external repair enterprises;
3. expenditures of households for the maintenance and repair;
4. expenditures of the public administration sector for maintenance and repair; and
5. similar expenditures of the NPISH (non-profit institutions serving households).

Thus, on one side we have declared total output, and the other side the following:

The difference between these indicators of demand and supply yields an assessment of the size of the NOE in the sector of maintenance and repairs.

The ratio of the two indicators provides the NOE rate in the spheres of repair and maintenance.

## 2.1. Construction

Given the specific nature of the sector (necessity of using the unfinished products' method), in order to assess the NOE it is very useful to analyze the results of the parallel survey of the annual and quarterly indicators, which will be given below.

In the majority cases, construction is a time-consuming process which frequently lasts for more than one year. In order to ensure the accuracy of the estimates, assessment should be done from the preliminary estimation of the building's total market price proportionally to the expenditures incurred during the accounting period.

Besides, at the final stage of the construction,

when the building's exact market price (price of the building or part thereof at which it will be transferred to the contractor or the buyer) becomes known, appropriate adjustments should be made to the reported data of the previous accounting periods.

The price of the construction intended for one's own use coincides with the expenditures on building's construction.

It is worth mentioning that the reported output of construction enterprises includes all construction and non-construction services and goods provided to it by other construction and non-construction organizations.

In such cases services and goods provided by these external organizations are reflected in the intermediary consumption of the consumer enterprise, which obviously will not be included in the total value added.



## 2.2. Restaurants' Services

Restaurants' services encompass services of restaurants (NACE 55.3), bars (NACE 55.4), canteens and catering businesses (NACE group 55.5).

The same estimation method used for the sector of repair and maintenance is applied to the assessment of the NOE in the sector of restaurants, bars and canteens. The only difference is that in this case external organizations' services should not be considered separately. The reason for this difference is that not a single example of a restaurant using services of another restaurant has ever been observed.

Restaurant services imply trade with readymade food and beverages, in the majority of cases meant for consumption on the site. The defining criterion, which differentiates such service from the simple trade with readymade food, is its immediate consumption. In this case space, table, chairs, waiter's service produces value added.

Restaurant services do not include the purchase of readymade food and its consumption at home. Purchased food should be at least partially consumed in the restaurant. Otherwise, this activity cannot be attributed to the restaurants' service category. Obviously, a restaurant does not use another restaurant's services while providing this category of services.

# 3. Description of Sampling

The survey covered all institutional sectors of the country's economy. In terms of high volume of work, the household and non-financial corporations sectors stood out.



## 3.1. Sampling by Institutional Sectors

Sample frames for enterprises have been drawn from three sources: the non-financial corporations sector, totality of organized food and goods markets and financial corporations.

For the survey of **non-financial corporations,** the sample frame of 33,513 enterprises drawn from annual survey was used.

For the survey of the organized **food and goods markets,** the sample frame of 313 units was formed.

The sample frame for **financial corporations** was formed based on the data provided by the National Bank and the Tax Department of Georgia.

The sample frame for **currency exchange points** included 704 units covering the entire country.

The sample frame for the **banking and insurance** sectors included 32 units. The sample frame for large leasing organizations included 30 units.

Non-financial organizations were stratified by size and types of activity (size was determined based on the total annual turnover, calculated for the 2006 annual survey of enterprises). Large enterprises were covered fully (1,865 units). Sampling for the rest of the enterprises was conducted so that the sampling error did not exceed 10%.

In making summations the sampling error at national level does not exceed 2%.

Sample sizes by strata for regions were distributed proportionally to the number of the enterprises located there. The sampling of concrete enterprises was done through systematic sampling. The sample size of the non-financial sector was 3,562 units.

Large markets have been covered fully, while random sampling was applied to the rest of the units.

Given the little variation for these sample indicators, systematic sampling was applied. The sample comprised 60 units.

In the financial sector, banks, insurance companies and large leasing companies were covered fully, though sampling was conducted for currency exchange points, where systematic sampling was used. The size of the sample is 116 units.

The overall sample of enterprises consisted of 3,749 units.

## 3.2. Sampling of Household Survey

The address database of the quarterly household survey, maintained in the Department of Statistics, was used as the basis for conducting the sampling of households.

In order to minimize impediments to the regular household survey, sampling was conducted based on the household addresses up-

dated and interviewed during the household survey conducted in January-February 2006.

The size of the sample was 2,234 unit addresses.

The system design of the survey envisages stratification by region, rural-urban and mountainous-lowland categories. Cluster sampling with preliminary stratification is used as the sampling design.

The selection of households for interviewing inside the clusters was conducted according to the method of systematic sampling. The size of the sample obtained ensures reliability and a maximum 5% sampling error throughout the country.



### 3.3. Weighting

In the process of the weights correction for both enterprises and households, non-response of the addresses was taken into account. In case of non-response for active addresses, respective weights were distributed to the appropriate strata; the weights of the useless addresses (unit not operating or non-existent) were cancelled.

In order to assess the value of decreased weights, the numbers of all active enterprises or households were compared to the similar indicators updated through ongoing statistical surveys. Afterwards, corrective factors were calculated and corrections were made.

# 4. Estimating the NOE in the Construction Sector

The estimation of the total production (total output) of the construction sector, which is essential for compiling the national accounts and macroeconomic analysis for Georgia, is conducted on the basis of the regular quarterly and annual statistical surveys of the business sector. This is the estimate used within national accounts for calculation of the total added value produced in construction.

NOE is estimated at the stage of the calculation of the total output.

This estimation is made through comparing the indicators of reported output and the data of other special purpose surveys.

In particular, balances of supply and consumption are made and the obtained results analyzed.

The current report aims at producing a reliable estimate of this particular indicator.

According to the quarterly BSS data, construction activities worth a total of GEL1070.2m were performed in 2006.



**Table 4.1** Construction data according to quarterly business sector survey (mil GEL):

| Total declared output | I -06 | II - 06 | III - 06 | IV - 06 |
|---|---|---|---|---|
| Total construction and civil engineering works | 85.6 | 171.4 | 217.9 | 218.8 |
| Construction of highways, roads, air-fields and sports facilities | 34.1 | 68.8 | 114.1 | 88.9 |
| Preparation of the construction sites, furnishing of buildings and completion | 8.5 | 17.9 | 20.75 | 23.3 |
| **Total** | **128.2** | **258.2** | **352.7** | **331.1** |
| **Total output in construction in 2006** | | | | **1 070.2** |

Table 4.1 shows that the total reported output in the construction sector in 2006 amounted to GEL1,070.2bn according to BSS data.

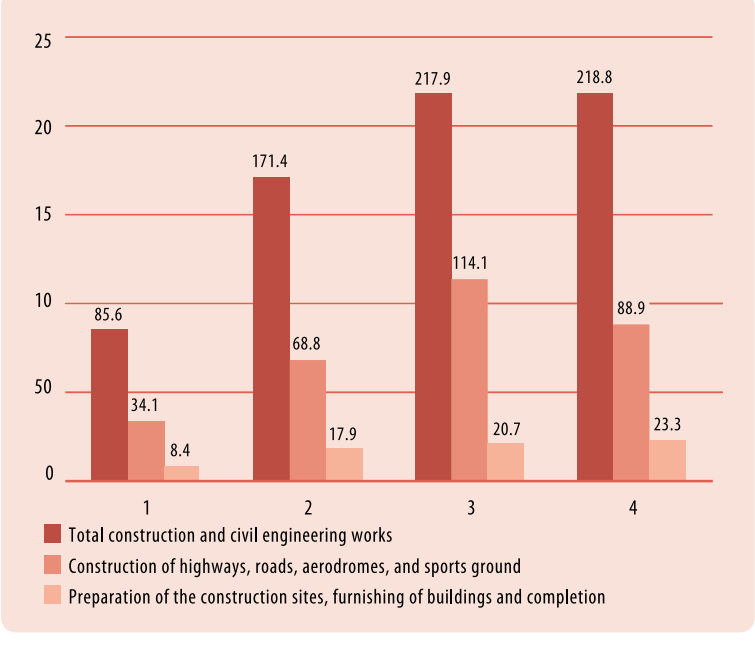
The business sector is the main actor within the construction industry. However, other institutional sectors also perform construction activities intended for their own consumption or partially for the market.

Among these sectors, households carry out quite wide-scale construction-repair activities through their own efforts or by hiring workers from the informal sector.

The data of the special purpose statistical survey "Assessment of the NOE in the spheres of construction, restaurants, business and maintenance" conducted in 2007 makes it possible to estimate the same indicator from the standpoint of consumption.

This survey covered the business (finan-

**Construction Sector Reported Output according to Business Sector Survey 2006 (mil. GEL)**



cial and nonfinancial corporations), household and public administration sectors. One of its main goals was the estimation of expenditures on construction during 2006.

The data on construction broken down by the institutional sectors of the country economy will be discussed below.

## 4.1. Data on Construction by the Institutional Sectors of the Economy

### *4.1.1. Construction in the Household Sector*

46,700 households responded in the affirmative when asked: "Have you performed any construction or repair works on your house or other building or facility (summer cottage, garage, winery, fencing of the yard) within your property during the year 2006?"

According to the explanatory part of this question, construction works were performed exclusively by the households themselves.

**Table 4.1.1** Form of performing construction works by households, in thousands of households

| By themselves | Hiring workers informally | Through a construction firm | Total |
|---|---|---|---|
| 29.5 | 17.2 | 0.00 | **44.7** |

Some households were carrying out several construction projects in parallel; therefore the total number of the types of construction activities (48.7) exceeds the total of the forms of construction (44.7).

**Types of Construction Activities Carried Out by Households in 2006, in thousands of households**

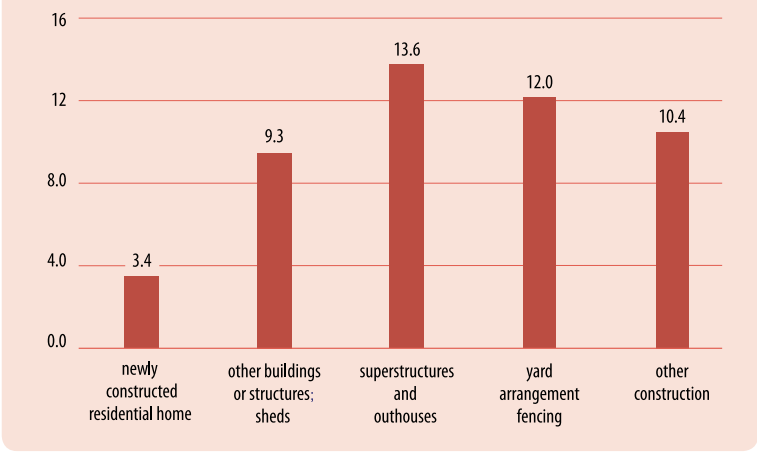



**Table 4.1.2** Types of construction activities carried out by households in 2006, in thousands of households

| | |
|---|---|
| Construction of a new house | 3.4 |
| Extension | 13.6 |
| Yard arrangement and fencing | 12.0 |
| Other construction | 10.4 |
| **Total** | **48.7** |

According to the survey data, only 4.1% of households were constructing new houses in 2006.

Repair and maintenance of existing buildings and constructions, their expansion, reconstruction, installation and refurbishment are classified as construction activities as well. According to the survey, as compared to new structures, households were more frequently engaged in working on existing buildings, carrying out works related to electricity wiring, water supply, heating system instalment, roofing, other external repairs, expansion, surfacing and painting. 19.4% of households indicated they were engaged in such works during 2006.

Repair of buildings and structures is mainly carried out either by households themselves or through hiring repairmen.

**Table 4.1.3** Forms of repairing buildings and structures

| By themselves | Hiring workers informally | Through a construction firm | Total |
|---|---|---|---|
| 103.3 | 84.1 | 11.6 | **201.0** |

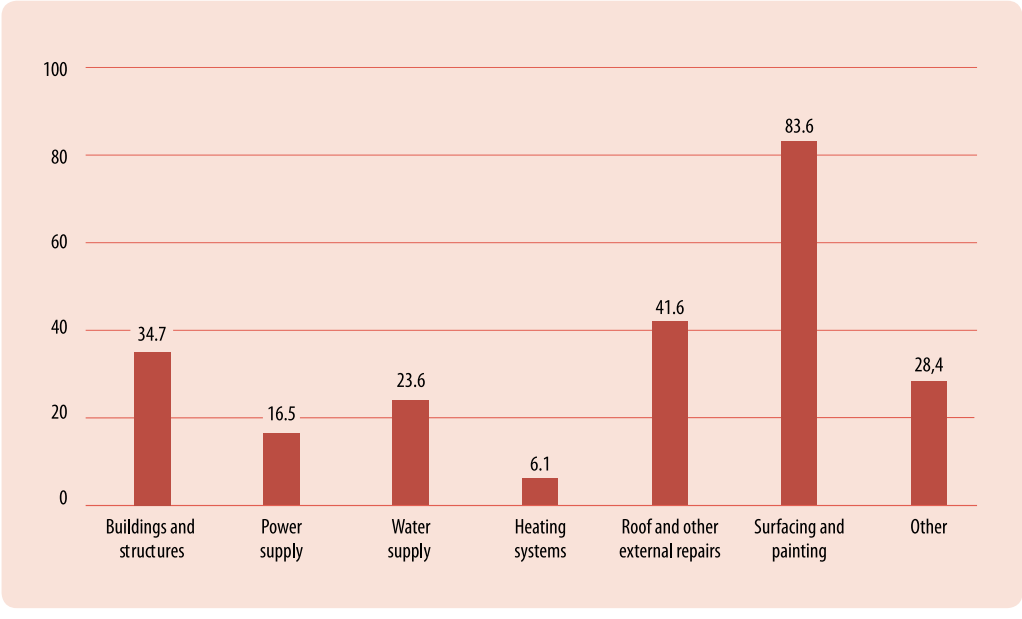
Frequency of repair works broken down by type of activity is as follows:

**Table 4.1.4** Frequency of repair works of the buildings and structures, in thousands of households

| | |
|---|---|
| Buildings and structures | 34.7 |
| Electricity supply | 14.5 |
| Water supply | 23.6 |
| Heating system | 4.1 |
| Roof or other external repairs | 41.6 |
| Surfacing (tiling, etc) or painting | 83.6 |
| Other works | 28.4 |
| **Total** | **234.5** |
| None of the above activities have been conducted | 974.5 |

The frequency distribution broken down by type of activity is better demonstrated in the diagram below:

**Forms of Construction by Households (thousands of households)**




Some households were carrying out several construction projects in parallel, hence the total amount of repair types (234.5) exceeds the total amount of repair forms.

a) When asked: "What is the amount of expenditures incurred for the construction or repair works (including materials, transportation, services of constructing organizations, workers and craftsmen)?"[17] respondents listed expenditures which totalled GEL 209.5m.

According to the survey data out of this estimated amount GEL44.6m was spent on the services of craftsmen and workers (construction workers, mechanics, sanitary technicians, loaders and construction organizations), while the value of construction work carried out by household members for their own use was estimated by the respondents at a total of GEL 37.8m.

b) Construction and selling of multi-apartment residential buildings is typical for cities. Expenditures of households incurred for building new apartments should certainly include expenditures paid to construction companies.

According to the survey results, 3,700 households answered positively when asked: "Did you purchase in 2006 any type of building or structure (house, apartment, summer cottage, shed, or any other capital construction) that was completed or still under-construction during the year 2006 directly?"

According to the survey data, total expenditures for apartments and other types of living space purchased directly from the supplier amounted to GEL 76.2m, and for other newly constructed buildings – GEL 2.5m.

Therefore, total expenditures of households incurred for construction, repair performed by household members and purchasing of the newly constructed dwelling and other buildings totaled GEL 288.3m in 2006.

[17] The questionnaire read: "Estimate the cost of the earlier purchased materials by the current approximate average market prices. Do not include the cost of the purchased but yet not consumed materials".

### 4.1.2 The Non-Financial Corporations Sector

According to the survey data for this sector, in 2006 out of the entire set of sector enterprises (31,140) 296 enterprises, 1%, indicated expenditures for purchasing buildings first hand.

The estimates show that 3,337 enterprises (10.7% of the total number) incurred expenditures for the construction of buildings intended for their own use as well as for major and minor repair works.

The beginning of the year is a comparatively unfavourable period for construction and repair. This is the reason for the lower level of expenditures during the first quarter of 2007 incurred for the major and minor self-repair of buildings. According to the survey results, only 1.9% (560 enterprises) of the total number of enterprises indicated that they carried out such works.

5.4% of enterprises surveyed had incurred expenditures for services of the external construction organizations and individuals.

Expenditure figures for construction in 2006 and the 1st quarter of 2007 obtained from the special purpose survey of the enterprises are given below:

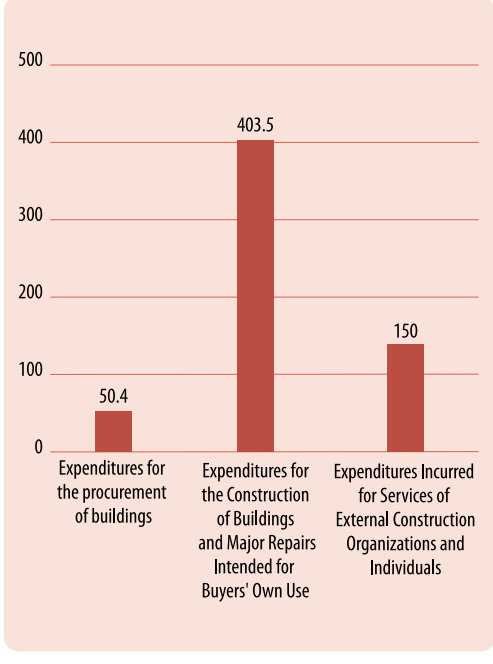
**Table 4.1.2.1** Expenditures of the business sector incurred for the construction and procurement of newly constructed buildings (GEL mil)Areas

| | 2006 | I Q of 2007 |
|---|---|---|
| Expenditures for purchasing newly constructed buildings | 50.4 | 10.8 |
| Expenditures for the construction of buildings intended for the businesses' own use and major repairs | 403.5 | 36.2 |
| Expenditures for the services of external construction organizations and individuals (workers and repaimen) | 150.0 | 9.2 |
| **Total expenditures incurred by the enterprises for construction** | **603.9** | **56.2** |

The structure of the construction costs incurred by the business sector reveals that its biggest portion was intended for the buyers' own use. The volume of sales of newly constructed buildings is significantly smaller.

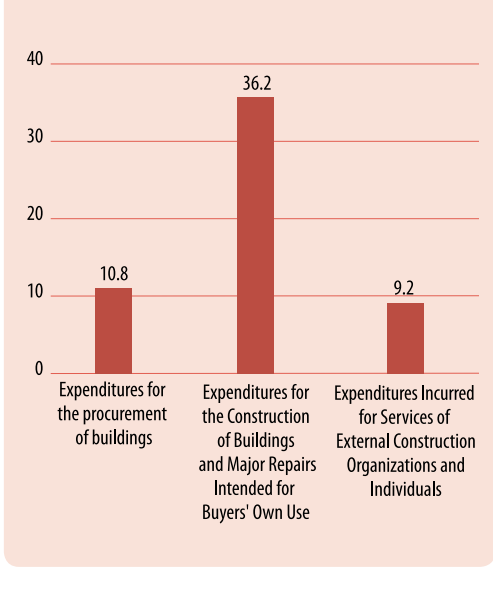
Two following diagrams demonstrate this statement.

**Expenditures within the Business Sector Incurred for the Construction and Procurement of Newly Constructed Buildings in 2006 (GEL mil)**




The same trend is observed in the 1st quarter of 2007

**Expenditures within the Business Sector Incurred for the Constrcution and Procurement of Newly Constructed Buildings in the 1st Quarter of 2007 (GEL mil)**



We can conclude that the majority of the buildings constructed are intended for the client's own use. These entities hire labor and use the services of construction organizations.

According to the survey, the share of the market supply in construction represents 20% of the total volume.

### 4.1.3 Public Administration Sector

Construction expenditures of the public administration sector mainly come from the construction and repair of engineering and communal buildings, other communications and transport highways.

According to the data obtained from the public administration sector, the total value of the construction works conducted by this sector amounts for GEL 590.7m in 2006.

The structure of these expenditures was the following:



**Table 4.1.3.1** Construction expenditures of the public administration sector (GEL mil)

| Expenditures | 2006 |
|---|---|
| Expenditures for purchasing newly constructed buildings | 0.8 |
| Expenditures for the construction of buildings intended for buyers' own use and major repairs | 296.6 |
| Expenditures for the services of the external construction organizations and individuals (workers and repairmen) | 293.3 |
| **Total expenditures incurred by the public administration sector for construction** | **590.7** |

## 4.2 Construction Expenditures by Institutional Sector

The table below demonstrates the summarized results of the construction expenditures broken down by all institutional sectors of the country's economy

**Construction Expenditures by Instiutional Sectors (GEL mil)**

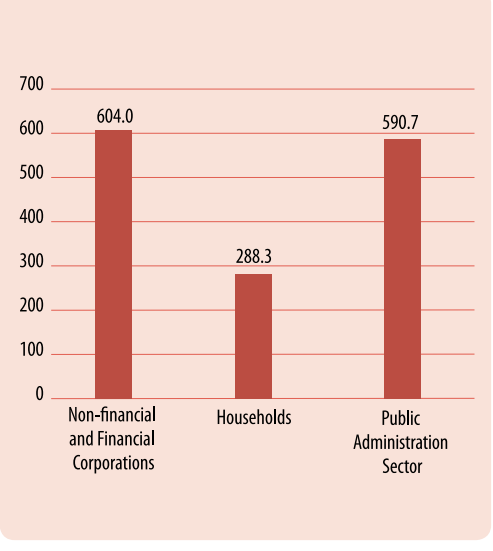



**Table 4.2.1** Expenditures incurred for construction in Georgia in 2006

| Sector | Expenditures GEL mil |
|---|---|
| Non-financial and Financial Corporations (Enterprises) | 604.0 |
| Households | 288.3 |
| Public Administration Sector | 590.7 |
| **Total Construction Expenditures** | **1483.0** |

Table 4.2.1 shows that according to the survey, the total value of the construction works incurred by all institutional sectors in 2006 amounts to GEL 1.483bn.

This estimate exceeds the total figure declared by business sector (GEL 1.0707bn) by GEL 412.8 mil. The difference obtained represents the size of the non-observed output.

The ratio of these two figures amounts to 1.4. This is the NOE rate in the construction sector.

This ratio can be used for making estimates of NOE in the construction sector while compiling the national accounts.

# 5. Estimating NOE in the sectors of Motor Vehicle Maintenance and Repair, Repair of Household Appliances and Personal Goods

Table 5.1 presents the results of the quarterly BSS for 2006 in the sphere of repair and maintenance

**Table 5.1** 2006 Declared output in the sector of repair and maintenance

| Description | I -06 | II - 06 | III - 06 | IV - 06 |
|---|---|---|---|---|
| Repair and maintenance of vehicles for enterprises | 0.15 | 0.03 | 0.03 | 0.02 |
| Repair and maintenance of vehicles for households | 1.41 | 2.23 | 2.32 | 2.10 |
| Repair of shoes | 0.02 | 0.01 | 0.02 | 0.02 |
| Repair of radio, audio, TV and video equipment | 0.05 | 0.03 | 0.04 | 0.01 |
| Repair of other electric appliances | 0.13 | 0.20 | 0.19 | 0.03 |
| Repair of clocks | 0.00 | 0.00 | 0.01 | 0.00 |
| Repair of jewelry | 0.02 | 0.02 | 0.01 | 0.01 |
| Repair and alteration of clothes | 0.01 | 0.01 | 0.01 | 0.00 |
| Repair and restoration of furniture | 0.01 | 0.00 | 0.00 | 0.00 |
| Repair of the cellular phones | 0.00 | 0.00 | 0.00 | 0.01 |
| Repair of other household appliances and consumer goods | 0.06 | 0.06 | 0.25 | 0.34 |
| **Total Declared Output, (GEL mil)** | | | | **9.87** |

As the table indicates, the total declared output in 2006 amounted to GEL 9.87m. At the same time, after comparing the numbers of entities requiring the services mentioned, a high level of the NOE in this sphere became obvious.

The majority of the enterprises in this sphere are small and are not registered taxpayers. A large portion of the services is provided by self-employed workers.

It is these factors first and foremost which precondition such a low level of declaration.

For this exact purpose and in order to estimate the actual level of the NOE in this sector, a special purpose survey was planned. The project was financed by the UNDP.

The special purpose survey covered all institutional sectors. Actual size of expenditures incurred for repairs and maintenance were investigated for the year 2006.

The volume of maintenance and repair of motor vehicles, repair of personal and household goods, office commodities and equipment has been estimated for the periods of 2006 and the 1st quarter of 2007.

The survey covered the sectors of the non-financial and financial corporations, households and public administration.

## 5.1 Expenditures of the Non-Financial and Financial Corporations Sector

3,749 enterprises were interviewed during the sample survey of the non-financial and financial corporations (out of a total of 31,140 enterprises).

According to the survey results:

- 5,106 enterprises (16.4% of the total number of enterprises ) incurred expenditures for repair and maintenance in 2006;
- 683 enterprises (8.8% of the total number of enterprises) showed expenditures for the repair services and maintenance of motor vehicles and motorcycles in 2006;
- 1,584 enterprises (5.1% of the total num-

ber of enterprises) had incurred expenditures for the repair of office equipment
- 1,853 enterprises (6.0% of the total number of enterprises) had incurred expenditures for the repair of the other equipment.

Below are the expenditures of the enterprises incurred for repair and maintenance estimated according to the survey:

**Table 5.1.1 Expenditures of the business sector for repair and maintenance (GEL mil)**

| | 2006 | 1st Quarter of 2007 |
|---|---|---|
| Expenditures for repair and maintenance of vehicles | 38.6 | 4.8 |
| Expenditures for repair and maintenance of office appliances | 3.8 | 0.8 |
| Expenditures for repair and maintenance of other equipment of the enterprise | 53.3 | 5.0 |
| **Total** | **95.7** | **10.5** |
| | | |
| Expenditures for repair and maintenance of vehicles | 9.1 | 0.8 |
| Expenditures for repair and maintenance of office appliances | 1.3 | 0.5 |
| Expenditures for repair and maintenance of other equipment of the enterprise | 10.9 | 0.8 |
| **Total** | **21.3** | **2.0** |
| | | |
| Expenditures for repair and maintenance of vehicles | 47.7 | 5.6 |
| Expenditures for repair and maintenance of office appliances | 5.1 | 1.3 |
| Expenditures for repair and maintenance of other equipment of the enterprise | 64.2 | 5.7 |
| **Total** | **117.0** | **12.5** |

Table 5.1.1 demonstrates that in 2006 the business sector incurred expenditures of GEL 117m for repair and maintenance, which significantly exceeds the total declared output.

## 5.2 Household Survey of Expenditures on Motor Vehicle Maintenance and Repair Services

According to the results of the household sample survey (as mentioned earlier, the household sample survey covered 2,234 households):

- 245,000 households owned at least one properly functioning vehicle (21% of the total number of households)
- total number of 263 vehicles are possessed by households

According to the survey data 82% of the vehicles possessed by households are automobiles.

**Table 5.2.1 Vehicles owned by households by type**

| | |
|---|---|
| Automobile | 82.1 |
| Minivan not exceeding 3 tons | 3.1 |
| Minibus for passenger transportation | 4.8 |
| Bus for transportation seating more than 20 passengers | 0.4 |
| Truck or tractor with tires | 9.6 |
| | 100.0 |

35,000 households in 2006 incurred expenses for repair and maintenance of vehicles (3.0% of the total number of households).

**Table 5.2.2 Frequency of expenditures for repair and maintenance of motor vehicles**

| Type of the service | 2006 | 1st Quarter of 2007 |
|---|---|---|
| External elements: lighting, doors, windshield, bumper | 0.57 | 2.04 |
| Repair of tires, equilibration | 7.62 | 4.91 |
| Internal elements: suspension, wheel chocks, breaks, ignition system, electric wiring; | 1.81 | 1.54 |
| Main elements: engine, engine basic block, shafting. | 4.43 | 1.92 |
| Anti-corrosion treatment of the car body, paintjobs | 0.39 | 0.45 |
| Other technical service and maintenance | 4.21 | 4.20 |
| Simple technical service, aside from repair of the electric wiring, tires and car body | 0.59 | 1.16 |
| Expenditures by the total amount paid | 15.43 | 10.83 |
| **Total** | **35.0** | **27.1** |
| % of the total population | 3.0 | 2.3 |

**Table 5.2.3 Forms of maintenance and repair services of motor vehicles**

| | Thousands | Percent |
|---|---|---|
| Mainly repair shop | 25.6 | 10.7 |
| Mainly repair mechanic | 125.3 | 52.3 |
| Mainly by themselves | 88.8 | 37.1 |
| **Total** | **239.7** | **100.0** |

Responses to the question "Whom do you usually turn to for technical services and maintenance of your motor vehicle?" were distributed as indicated in table 5.2.3.

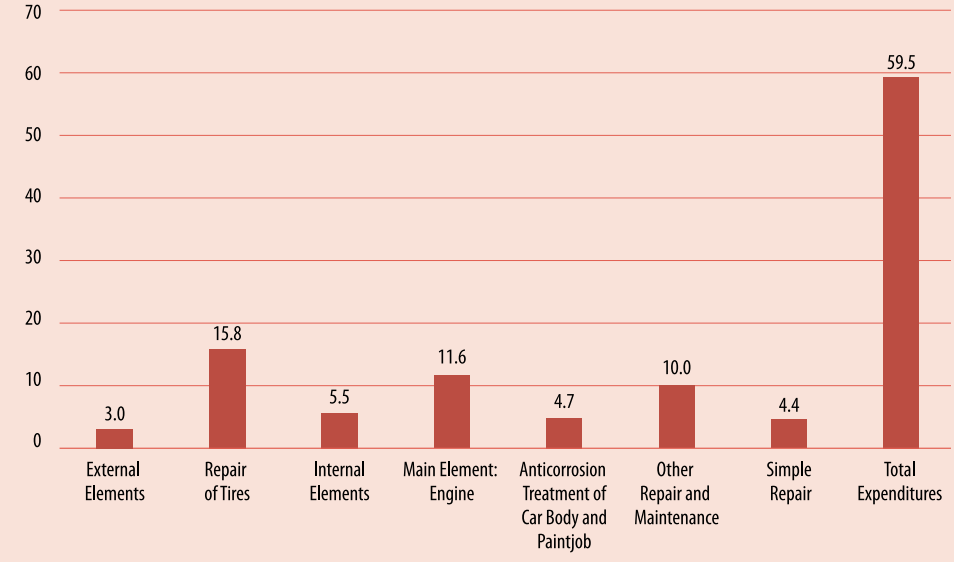
Respondents were questioned regarding the expenditures incurred for the repair and maintenance of motor vehicles: "Please recall what expenditures you incurred for the repair and maintenance of your vehicle (including costs of the spare parts and materials)?"

Additionally the respondents were given the appropriate explanation:
"Please indicate the cost of repair and maintenance irrespective of the mode of payment – whether it was in advance, after the completion of service, postponed, or free of charge (please estimate value of services you provided yourself or received free of charge based on the current market prices)."

**Table 5.2.4 Expenditures for the repair and maintenance of motor vehicles in 2006**

| Type of the service | I vehicle | II vehicle | Total Expenses |
|---|---|---|---|
| External elements: lighting, doors, windshield, bumper | 3.0 | 0.1 | 3.0 |
| Repair of tires, equilibration | 14.1 | 1.6 | 15.8 |
| Internal elements:suspension, wheel chocks, breaks, ignition system, electric wiring; | 5.4 | 0.2 | 5.5 |
| Main elements: engine, engine basic block, shafting. | 10.7 | 0.9 | 11.6 |
| Anti-corrosion treatment of the car body, paintjobs | 4.7 | 0.0 | 4.7 |
| Other technical service and maintenance | 9.6 | 0.4 | 10.0 |
| Simple technical service, aside from repair of the electric wiring, tires and car body | 4.3 | 0.0 | 4.4 |
| Expenditures by the total amount paid | 56.0 | 3.5 | 59.5 |
| **Total** | **107.7** | **6.8** | **114.5** |

**Estimates of Annual Expenditures Incurred for the Repair and Maintenance of Vehicles**




Expenditure figure for the repair and maintenance of motor vehicles for the 1st quarter of 2007 almost fully corresponds to the average expenditure figure for the previous year.

**Table 5.2.5** Expenditures for the repair and maintenance of motor vehicles in the 1st quarter of 2007

| Type of the service | I vehicle | II vehicle | Total Expenses |
|---|---|---|---|
| External elements: lighting, doors, windshield, bumper | 0.9 | 0.0 | 0.9 |
| Repair of tires, equilibration | 3.2 | 0.1 | 3.3 |
| Internal elements:suspension, wheel chocks, breaks, ignition system, electric wiring; | 1.7 | 0.1 | 1.8 |
| Main elements: engine, engine basic block, shafting. | 2.9 | 0.2 | 3.0 |
| Anti-corrosion treatment of the car body, paintjobs | 0.9 | 0.0 | 0.9 |
| Other repair and maintenance | 2.8 | 0.1 | 2.9 |
| Simple technical repair, aside from repair of the electric wiring, tires and car body | 1.2 | 0.1 | 1.3 |
| Expenditures by the total amount paid | 13.9 | 0.7 | 14.6 |
| **Total** | **27.4** | **1.2** | **28.6** |

## 5.3 Data and Analysis of the Household Survey of Expenditures for Repair and Maintenance of Household and Personal Goods

According to the survey data, households mainly either turn to private mechanics for the repair and maintenance of household and personal goods or do the work themselves.

The percentage who refer to repair shops in such situations is very low – only 3%.

**Table 5.3.1** Distribution of the repair and maintenance of household and personal goods by type of performer

| Performer: | | |
|---|---|---|
| Repairing organization | 35.5 | 3.0 |
| Private Mechanics | 644.3 | 54.2 |
| Mainly by themselves | 509.2 | 42.8 |
| **Total** | **1 189.0** | **100.0** |

According to the survey estimates, expenditures incurred for the repair and maintenance of household and personal goods are as follows:

**Table 5.3.2** Expenditures Incurred for the repair and maintenance of household and personal goods

| Type of the service | 2006,GEL | 1st Quarter of 2007,GEL |
|---|---|---|
| Repair of radio, audio, TV and video equipment | 4.5 | 1.4 |
| Repair of refrigerators, washing machines, vacuum cleaners, floor-polishers | 4.3 | 1.1 |
| Lighting equipment, gas stoves, gas heaters, water heaters | 1.6 | 0.9 |
| Repair of electric heaters, air conditioners, irons and other electric equipment | 0.7 | 0.4 |
| Repair and restoration of furniture | 3.4 | 0.9 |
| Repair of telephones (including cellular phones) | 0.9 | 0.6 |
| Repair of shoes | 9.2 | 2.6 |
| Repair and alteration of clothes | 2.7 | 0.9 |
| Repair of bicycles | 0.1 | 0.0 |
| Washing and restoration of carpets | 2.5 | 0.3 |
| Tuning and restoration of pianos and other musical instruments | 0.2 | 0.0 |
| Repair of clocks | 0.2 | 0.2 |
| Repair of jewellery | 0.3 | 0.0 |
| Repair of suitcases, bags, etc. | 0.1 | 0.0 |
| **Total expenditures:** | **30.7** | **9.4** |

**Table 5.3.3** Expenditures of the household sector for repair and maintenance services (GEL mil)

| Expenditures | 2006 | 1st Quarter of 2007 |
|---|---|---|
| For the repair and maintenance of means of transportation | 114.5 | 28.6 |
| For the repair and maintenance of household and personal goods | 30.7 | 9.4 |
| **Total repair and maintenance** | **145.2** | **38.0** |

## 5.4 Public Administration Sector

The survey of public administration agencies covered ministries and their subordinate organizations. Table 5.4 shows the results of the survey.

**Table 5.3.2** Expenditures Incurred for the repair and maintenance of household and personal goods

| Expenditures | 2006 |
|---|---|
| Expenditures for repair, total (except expenses for major repair of buildings and construction), total | 3.3 |
| Expenses for repair and maintenance of motor vehicles and motorcycles, total | 2.9 |
| Expenditures for repair of office appliances, total | 0.4 |
| Expenditures for services of external repair/maintenance organizations and individuals, total | 1.7 |
| Expenses for repair and maintenance of motor vehicles and motorcycles, total | 1.6 |
| Expenditures for repair of office appliances, total | 0.1 |
| **Total expenditures of the public administration institutions incurred for repair and maintenance services (GEL mil)** | **5.0** |

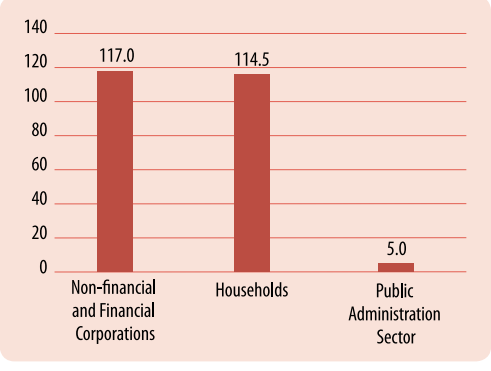
## 5.5 Expenditures for Repair and Maintenance by Institutional Sectors

Aggregating expenditures of different sectors obtained as a result of the above mentioned survey provides for the total result broken down by institutional sector (table 5.5.1)

**Table 5.5.1** Expenditures incurred in Georgia for repair and maintenance in 2006

| Sector | Expenditures (GEL mil) |
|---|---|
| Non-financial corporations (enterprises) | 1 17.0 |
| Households | 114.5 |
| Public administration institutions | 5.0 |
| **Total expenditures incurred for repair and maintenance (GEL mil)** | **236.5** |

**Expenditures Incurred in Georgia for Repair and Maintenance in 2006, Broken Down by Institutional Sector (GEL mil)**




The diagram reflects the estimates of the repair and maintenance sector broken down by institutional sectors obtained from the NOE survey.

Table 5.5.1 indicates that GEL 236.5m was spent in Georgia in 2006 for repair and maintenance services. This figure exceeds the total declared output (GEL 9.87m) by GEL 226.6m.

As the diagram demonstrates, the volume of the non-observed total output including repair of industrial machines and equipment constitutes nearly 24 times the reported total output.

As for the total output, excluding repair of industrial machines and equipment, the NOE rate is much lower, totalling 15.63 (154.28/9.87=15.63).

**Table5.5.2** Volume of reported and non-observed total output in the repair and maintenance sector (including repair of industrial machines and equipment)

| | |
|---|---|
| Total output reported in official business statistics | 9.87 |
| Annual expenditures of the household sector for the repair and maintenance according to the special purpose survey (GEL mil) | 236.5 |
| Rate of non-observed output | 24.0 |

**Table5.5.3** Volume of reported and non-observed total output in the repair and maintenance sector (excluding repair of industrial machines and equipment)

| | |
|---|---|
| Total output reported in official business statistics | 9.87 |
| Households | 96.54 |
| Public administration | 5.0 |
| Annual expenditures of financial and non-financial corporations sector according to the special purpose survey | 52.74 |
| Rate of non-observed output | 15.63 |

Obviously this circumstance should be taken into account when making estimates of the total output in the course of compiling the national accounts.

# 6. Assessment of the NOE in the Sphere of Restaurants' Services

II

Services of restaurants include services provided by cafes, bars, canteens and children's entertainment centers.

Table 6.1 shows the results of the quarterly BSS for the mentioned sector:

**Table 6.1** Results of the quarterly BSS (GEL mil)

| | I 06 | II 06 | III 06 | IV 06 | 2006 | I 07 |
|---|---|---|---|---|---|---|
| Restaurants | 11.9 | 9.1 | 9.7 | 10.2 | 41.0 | 5.65 |
| Bars | 1.7 | 1.8 | 1.6 | 1.1 | 6.3 | 0.88 |
| Canteens and Readymade Food Suppliers | 3.7 | 2.8 | 4.2 | 3.1 | 13.8 | 4.09 |
| **Total** | **17.4** | **13.7** | **15.6** | **14.5** | **61.1** | **10.6** |

Table 6.1 shows that the total declared output in the restaurants sector in 2006 amounted to GEL 61.1m.

In order to estimate the expenditures incurred for the restaurant services in 2006, the survey covered financial and non-financial corporations, households and the public administration sector. This survey sought to estimate the expenditures incurred by these institutional sectors for restaurant services in 2006.

3,749 enterprises of the financial and non-financial corporations sector were covered by the sample survey.

According to the survey estimates, only 638 enterprises had incurred expenditures for restaurant services (2.1% of the total number of interviewed).

**Table 6.2** Expenditures for restaurant services in the business sector (GEL mil)

| Expenditures | 2006 |
|---|---|
| Expenditures for the services of restaurants, bars, canteens and readymade food suppliers | 8.5 |
| **Total expenditures incurred by enterprises for restaurant services** | **8.5** |

2,234 households were interviewed by the household sample survey. Each household member over the age of 15 years was personally interviewed about the expenditures incurred for restaurant services.

The following table 6.3 shows that according to the survey results, 393,000 individuals throughout the country visited a restaurant, canteen, cafe, readymade food supplier or consumed services of other food establishments within the past week.

**Table 6.3** Frequency of households' consumption of the restaurants' and cafes' services and the ready food supply

| | Women | Men | Total |
|---|---|---|---|
| Restaurant | 13.2 | 31.4 | 44.6 |
| Café | 43.7 | 54.1 | 97.8 |
| Bar and Night club | 6.1 | 21.9 | 27.9 |
| Canteen | 1.2 | 65.8 | 67.0 |
| Readymade Food Supplier | 5.3 | 2.9 | 8.2 |
| Fast food | 45.2 | 86.2 | 131.4 |
| Other | 2.7 | 13.6 | 16.3 |
| **Total** | **117.4** | **275.9** | **393.3** |

| Percentage | Women | Men | Total |
|---|---|---|---|
| Restaurant | 11.3 | 11.4 | 11.3 |
| Café | 37.2 | 19.6 | 24.9 |
| Bar and Night club | 5.2 | 7.9 | 7.1 |
| Canteen | 1.0 | 23.8 | 17.0 |
| Readymade Food Supplier | 4.5 | 1.1 | 2.1 |
| Fast food | 38.5 | 31.2 | 33.4 |
| Other | 2.3 | 4.9 | 4.1 |
| **Total** | **100.0** | **100.0** | **100.0** |

Table 6.3 clearly shows that the level of activity by men is almost twice that of women. The exception is the consumption of readymade foods.

Overall, fast food places and cafes are quite popular among women. The female population chooses cafes or fast food in 75% (3/4) of cases.

Males' choice is comparatively diverse: they go to fast food establishments, canteens and cafes with the probability of 3/4 of the total number of visits.

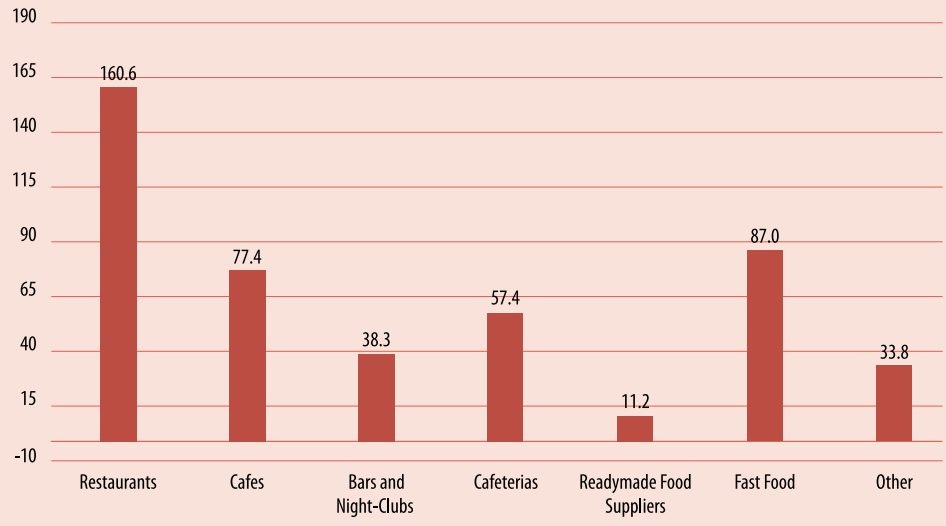
Expenditures incurred by households for the services of restaurants, cafes, readymade food suppliers are also attributed to the popular types of services.

**Table 6.4** Expenditures of households for restaurants, cafes, and readymade food supply services (in thousands of GEL)

| | Restaurant | Cafe | Bars and Night-Clubs | Cafeterias and Catering Cars | Readymade Food Suppliers | Fast Foods | Other Catering Businesses | Total Expenditures |
|---|---|---|---|---|---|---|---|---|
| Female | 24.7 | 33.4 | 6.0 | 0.4 | 10.0 | 37.5 | 3.5 | 115.5 |
| Male | 135.9 | 44.0 | 32.2 | 57.0 | 1.2 | 49.5 | 30.3 | 350.1 |
| **Total** | **160.6** | **77.4** | **38.3** | **57.4** | **11.2** | **87.0** | **33.8** | **465.6** |
| Percentage | | | | | | | | |
| Male | 15.4 | 43.2 | 15.8 | 0.6 | 89.5 | 43.1 | 10.5 | 24.8 |
| Female | 84.6 | 56.8 | 84.2 | 99.4 | 10.5 | 56.9 | 89.5 | 75.2 |
| **Total** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |

The diagram below shows how the expenditures differ according to the different types of catering enterprises:

**Expenditures Incurred in Restaurants, Cafes, Bars and Other Places of Food and Leisure (GEL millions)**

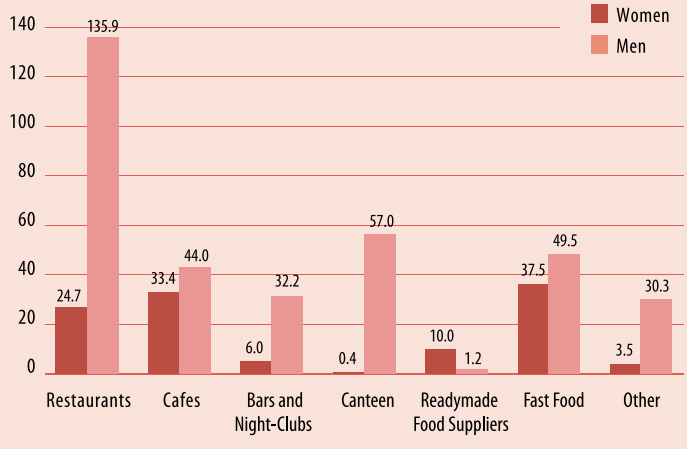



The table above evidently points to the big difference between the expenditures incurred by men and women for restaurants, cafes and readymade food suppliers. An even greater difference is discerned between volumes of expenditures incurred by men and women. Men are the main consumers of restaurant services.

More than 80% of expenditures by women were incurred in cafes and fast food places.

The majority of men's expenditures incurred in dining establishments went to restaurants and canteens.

**Expenditures for Restaurants, Cafes, Bars, and Other Places of Food and Leisure, GEL mil.**




According to the total consumption, 3/4 of expenditures incurred in food provision facilities are made by men. This circumstance can be explained mainly by the difference in the employment level and structure of men and women.

According to the labor force survey in Georgia, the share of economically inactive adult women is nearly twice that of men.

The majority of women are busy at home and with children. This is directly linked to the considerably higher level of expenditures incurred by men for restaurants, cafes and readymade food suppliers.

Aggregate figures of this survey considerably exceed the data obtained from the regular BSS, which is evidence of the large share of the NOE in this sector.

**Table 6.5** Distribution of the expenditures incurred for the restaurants' serves by type of catering organization and gender (GEL mil)

| | Women | Men | Total |
|---|---|---|---|
| Restaurant | 24.7 | 135.9 | 160.6 |
| Café | 33.4 | 44.0 | 77.4 |
| Bar and Night club | 6.0 | 32.2 | 38.3 |
| Canteens | 0.4 | 57.0 | 57.4 |
| Readymade Food Supplier | 10.0 | 1.2 | 11.2 |
| Fast food | 37.5 | 49.5 | 87.0 |
| Other Catering Objects | 3.5 | 30.3 | 33.8 |
| **Total** | **115.5** | **350.1** | **465.6** |

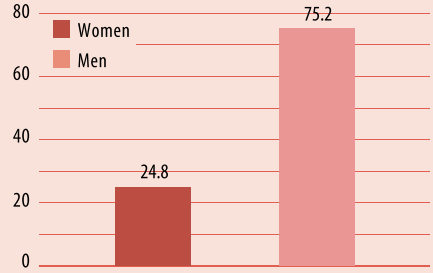
| Percentage | Women | Men | Total |
|---|---|---|---|
| Restaurant | 21.4 | 38.8 | 34.5 |
| Café | 28.9 | 12.6 | 16.6 |
| Bar and Night club | 5.2 | 9.2 | 8.2 |
| Canteens | 0.3 | 16.3 | 12.3 |
| Readymade Food Supplier | 8.6 | 0.3 | 2.4 |
| Fast food | 32.5 | 14.1 | 18.7 |
| Other Catering Objects | 3.1 | 8.6 | 7.3 |
| **Total** | **100.0** | **100.0** | **100.0** |

Cafes and fast food places are popular among the population in terms of the expenditure structure as well. Women choose cafes or fast food in about 75% (3/4) of cases.

The diagram to the right reflects the percentage distribution of the total expenditures in the restaurants sector by gender of the consumers presented in table 6.5:

The next diagram reflects the distribution of the total expenditures incurred in catering and leisure places by gender of consumers.

**Total Expenditures in the Restaurants Sector by Gender of the Consumers**




**Percentage Structure of the Expenditures Incurred in Catering Places Broken Down by Gender of Consumers**

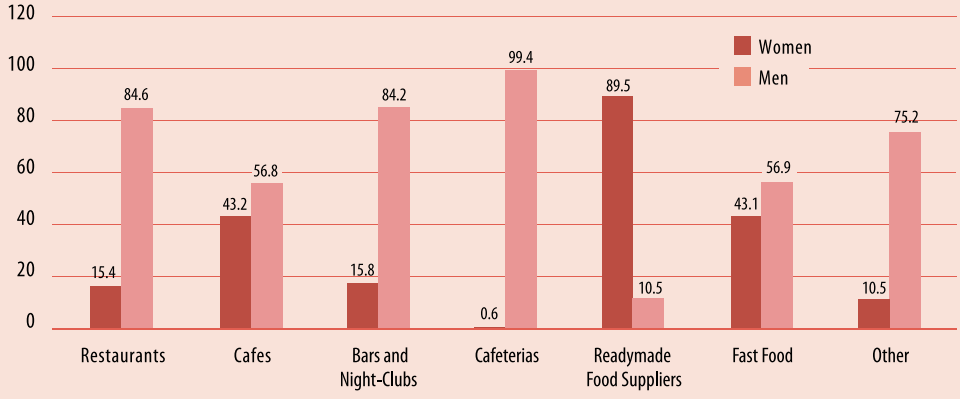


Table 6.5 indicates that total expenditures incurred by households throughout Georgia in 2006 for restaurants services amounts to GEL 465.6m, which far exceeds the total reported output of the restaurants and other catering places.

The survey covered all ministries and their subordinate organizations. The results of the survey are given in table 6.6.

**Table 6.6** Expenditures by the public administration sector for restaurants services (GEL mil)

| Expenditures | 2006 |
|---|---|
| **Expenditures incurred for the services of restaurants, bars, canteens, and readymade food suppliers, total** | **5.5** |

Aggregating of the results according to the above-mentioned sectors provides the figure of total expenditures for the country incurred for the restaurants' services (Table 6.7)

**Table 6.7** Expenditures incurred throughout Georgia in 2006 for the services of restaurants and other dining establishments by institutional sectors

| Sector | Expenditures (GEL mil) |
|---|---|
| Non-financial corporations (enterprises) | 8.5 |
| Households | 465.6 |
| Public administration institutions | 5.5 |
| **Total expenditure incurred for the services of restaurants and other dining establishments (GEL mil)** | **479.6** |

According to the final results of the survey, GEL 479.6 mil was spent on restaurant services in Georgia in 2006, while the total reported output in this sector is only GEL 61.1 mil. The difference between these two figures (GEL 418.5 mil) represents the size of the total non-observed output for 2006.

The ratio of these two indicators yields the following NOE rate for the restaurants sector: 479.6 / 61.13 = 7.846

This rate will be taken into account during the compilation of the national accounts for the estimation of the total output of the particular sector.

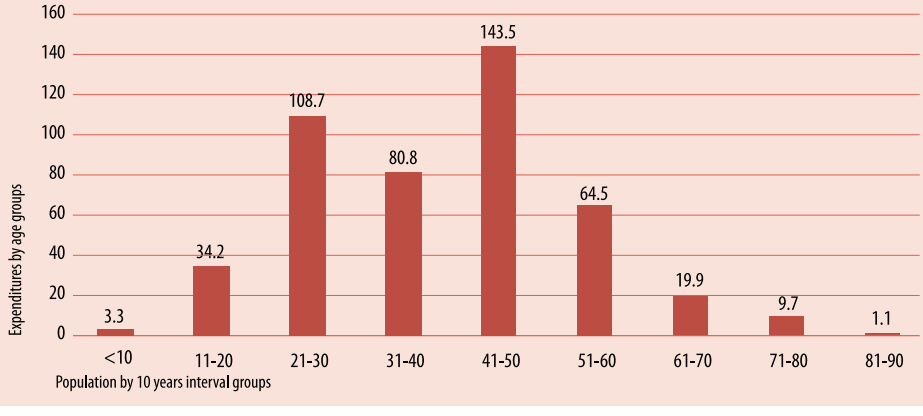
The survey of restaurants and other catering places was conducted through personal interviews. This method makes it possible to analyze the data by age and gender.

Population aged 20-60 years bear 85% of the expenditures incurred in the restaurants and other food provision facilities:

**Table 6.8** Household expenditures incurred for the services of restaurants and other catering places in Georgia in 2006 by age groups:

| Age Groups | Expenditures, ThousandGEL | Percentage |
|---|---|---|
| younger than10 | 3.3 | 0.7 |
| 11-20 | 34.2 | 7.3 |
| 21-30 | 108.7 | 23.3 |
| 31-40 | 80.8 | 17.4 |
| 41-50 | 143.5 | 30.8 |
| 51-60 | 64.5 | 13.8 |
| 71-80 | 9.7 | 2.1 |
| 81-90 | 1.1 | 0.2 |
| **Total** | **465.6** | **100.0** |

**Expenditures in Dining Establishments**



# 7. Survey Questionnaires

Quarterly Business Sector Survey is conducted for obtaining reported turnover and total output. Below is the questionnaire elaborated for this survey.

MINISTRY OF ECONOMIC DEVELOPMENT
OF GEORGIA
Department of Statistics

ADDRESS: 4 PEKINI STR., 0115 TBILISI
TEL.: (995 32) 33 70 33/33 40 96
FAX: (995 32) 33 22 79/33 70 33
E-mail: info@statistics.gov.ge
Web site: http://www.statistics.ge

**STATISTICAL SURVEY OF ENTERPRISES**

**QUESTIONNAIRE N 01-01-02** (ANNUAL)
APPROVED BY THE CHAIRMAN OF THE DEPARTMENT OF STATISTICS – UNDER- AUTHORITY ORGANIZATION OF THE MINISTRY OF ECONOMIC DEVELOPMENT BY THE DECREE DATED 17.01.2007 #04-S

☐QUESTIONNAIRE WILL BE SUBMITTED BY THE EVERY ORGANIZATIONAL-LEGAL STATUS ENTURPRISE (EXCEPT INDIVIDUAL ENTERPRISES), DESPITE THE TYPE OF ECONOMIC ACTIVITY, FORM OF OWNERSHIP AND SIZE, NO LATER THAN APRIL 1 OF THE CURRENT YEAR TO THE STRUCTURAL BRANCH OF THE TERITORIAL BODY OF THE STATE STATISTICS.
☐ACCORDING TO THE FIRST PARAGRAPH OF THE 11TH CLAUSE OF THE LAW ON STATISTICS OF GEORGIA, ENTERPRISE SHALL PROVIDE TRUTHFUL AND COMPLETE STATISTICAL DATA TO THE DEPARTMENT OF STATISTICS FREE OF CHARGE
☐ INDIVIDUAL DATA, BEING COMMERCIAL CONFINDENTIALITY, IS CONSIDERED CONFIDENTIAL AND PROTECTED BY THE GENERAL ADMINISTRATIVE CODE AND THE 12TH CLAUSE OF THE LAW ON STATISTICS OF GEORGIA.
☐ **GREY BOXES SHOULD BE COMPLETED IN THE DEPARTMENT OF STATISTICS**

OBSERVATION PERIOD ..... YEAR

COMPLETE NAME OF THE ORGANIZATION

**IDENTIFICATION NUMBER OF THE STATISTICAL REGISTER**

**TAX PAYER'S IDENTIFICATION NUMBER**

**MANAGER**
(Name, Last Name)

(Signature)

**PART I. IDENTIFICATION INFORMATION**

I **LEGAL ADDRESS**
(According to the Registration document)

(Region)

(City, Settlement, Community) * Please underline one

(Village)

(Street and other details)

Postal Code

**ACTUAL ADDRESS**

(Region)

(City, Settlement, Community) * Please underline one

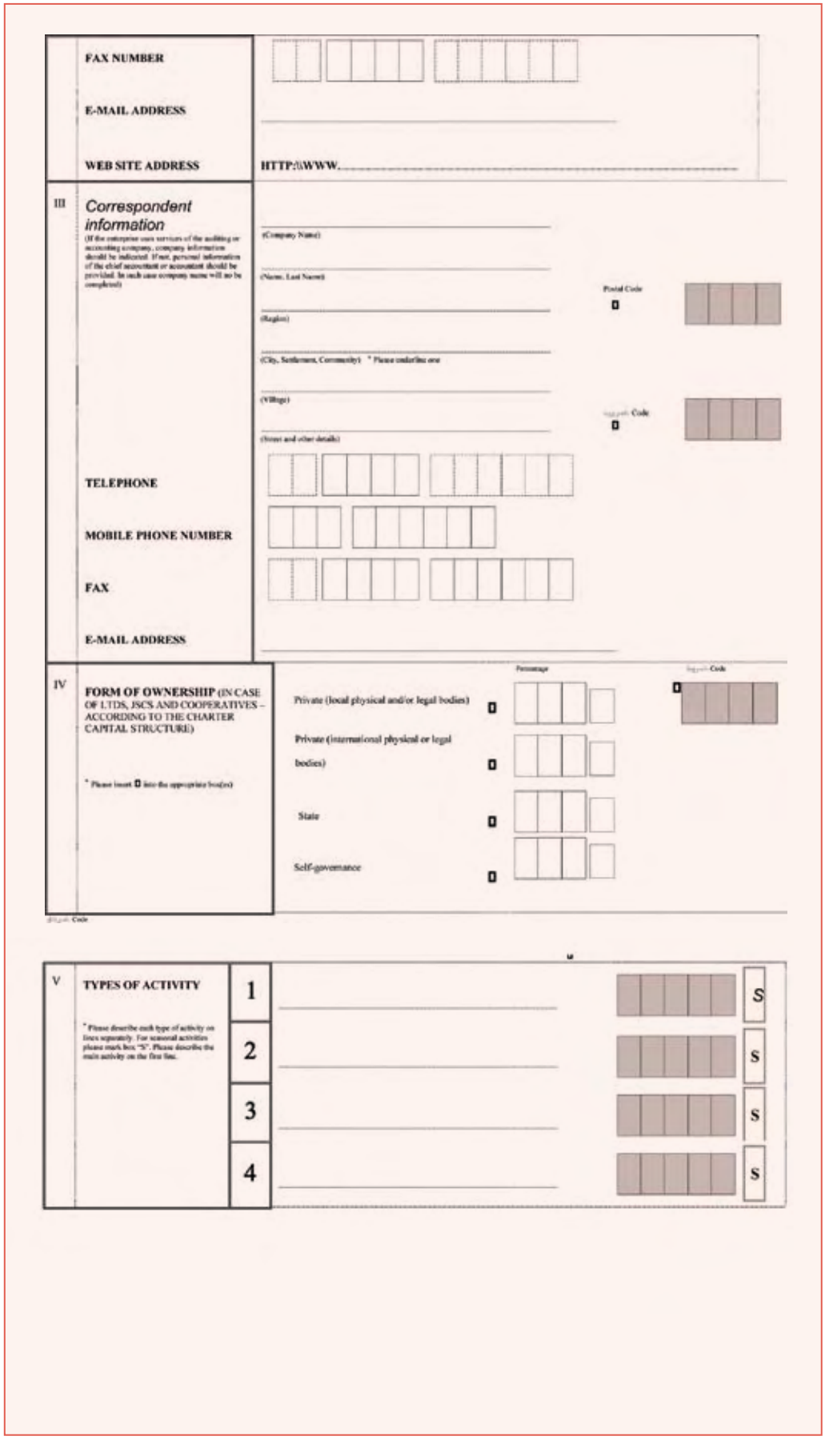
(Village)

(Street and other details)

Postal Code

II **TELEPHONE**

**MOBILE PHONE NUMBER**



| | | |
|---|---|---|
| | FAX NUMBER | |
| | E-MAIL ADDRESS | |
| | WEB SITE ADDRESS | HTTP://WWW. |
| III | *Correspondent information* (If the enterprise uses services of the auditing or accounting company, company information should be indicated. If not, personal information of the chief accountant or accountant should be provided. In such case company name will not be completed) | (Company Name)<br>(Name, Last Name)<br>(Region)<br>(City, Settlement, Community) * Please underline one<br>(Village)<br>(Street and other details)<br>Postal Code<br>Code |
| | TELEPHONE | |
| | MOBILE PHONE NUMBER | |
| | FAX | |
| | E-MAIL ADDRESS | |

| | | | | |
|---|---|---|---|---|
| IV | FORM OF OWNERSHIP (IN CASE OF LTDS, JSCS AND COOPERATIVES – ACCORDING TO THE CHARTER CAPITAL STRUCTURE)<br>* Please insert ☐ into the appropriate box(es) | | Percentage | Code |
| | | Private (local physical and/or legal bodies) ☐ | | ☐ |
| | | Private (international physical or legal bodies) ☐ | | |
| | | State ☐ | | |
| | | Self-governance ☐ | | |

| | | | | |
|---|---|---|---|---|
| V | TYPES OF ACTIVITY<br>* Please describe each type of activity on lines separately. For seasonal activities please mark box "S". Please describe the main activity on the first line. | 1 | | S |
| | | 2 | | S |
| | | 3 | | S |
| | | 4 | | S |

## PART II. INCOME AND EXPENDITURE

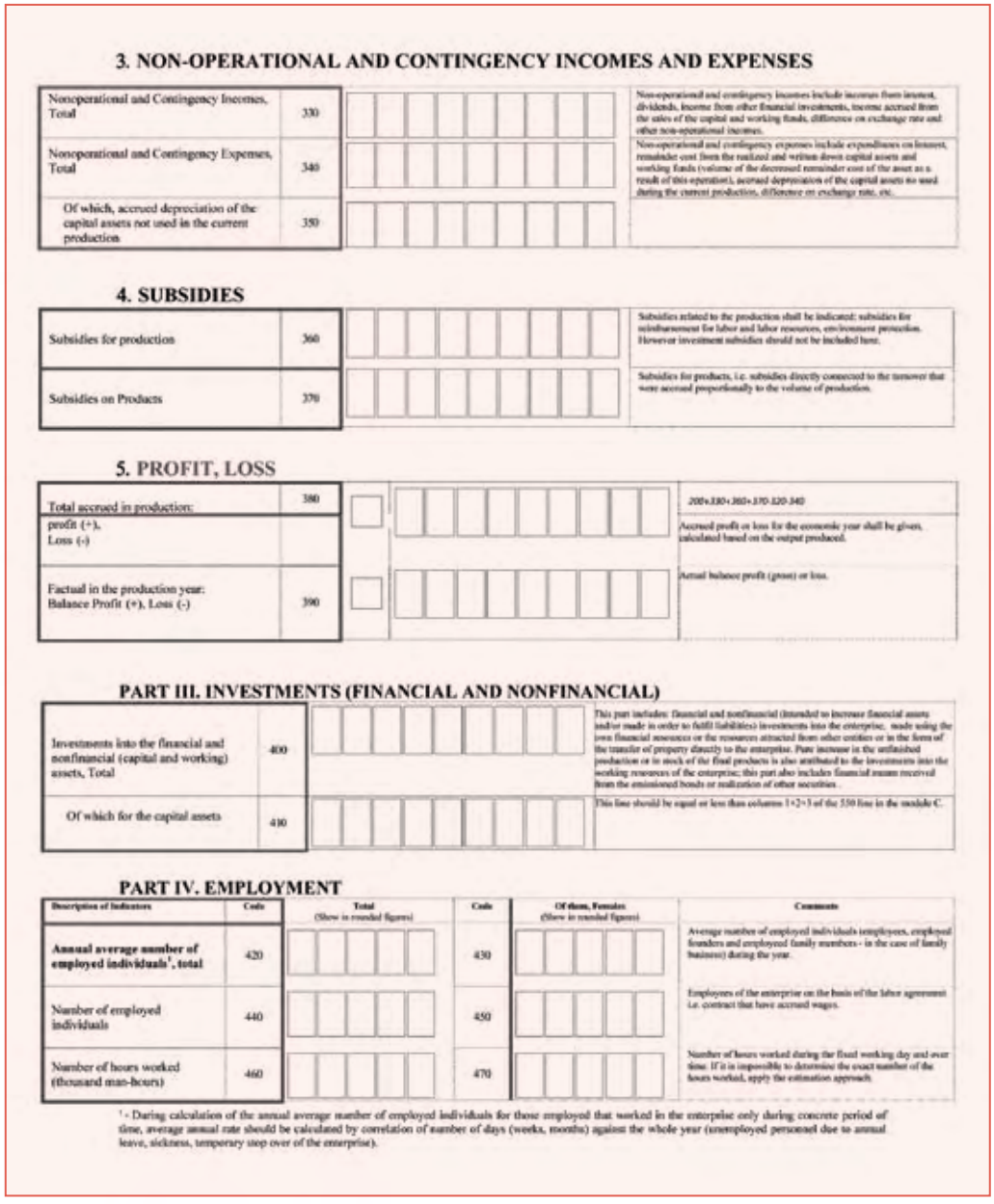
### 1. OPERATIONAL INCOME (PRODUCTION OUTPUT)

| INDICATOR | Code | | (GEL) | Comment |
|---|---|---|---|---|
| **TURNOVER BY TYPES OF ACTIVITY**<br>* Make records in boxes 100-103 by types of activities, following the same consequence as on the previous page.<br>* Please indicate only **pure assets**, if you act as the **financial intermediary** | 100 | 1 | | Sales or accrued incomes received from sales of goods and services (including barter) without VAT and excise. Turnover will not include sales of assets, operational subsidies i.e. production subsidies. |
| | 110 | 2 | | |
| | 120 | 3 | | |
| | 130 | 4 | | |
| **TURNOVER, TOTAL** | 140 | | | Total amount of sales by each type of activities, without VAT and excise.<br>*100+110+120+130* |
| Cost of products supplied in-kind, free of charge or barter | 150 | | | Indicated is the volume of the differently used products, calculated by prices effective at the moment of completion of their manufacturing process, without VAT and excise. |
| Capitalized goods and services | 160 | | | Products manufactures for the own use or investment that are calculated based on the current prices. |
| Other operational income, name _____ | 170 | | | Income received from grants, donations, membership fees to non-commercial or other organizations (grants, donations, etc.) |
| Changes in volume of the incomplete production (+ increase, - decrease) | 180 | ☐ | | Difference between volumes of the incomplete production at the end and at the beginning of the year. Assessment of the size of incomplete production (construction, winery, etc.) is made based on the current prices against actual expenditures incurred during the year (including profit). |
| Changes in the volume of the finished products' stock (+ increase, - decrease) | 190 | ☐ | | Difference in stock of ready products' between the end and the beginning of the year. Own production goods that are ready for supply or sales, in current prices (including profit). |
| **OUTPUT OF PRODUCTS[1] (GOODS AND SERVICES)** | 200 | | | Without VAT and excise.<br>*Sum of the 140-190 lines, minus 120* |

[1] Index indicated in the 200th line should equal the cost of the enterprise's production, manufactured during the year and intended for realization outside of the enterprise, calculated according to the prices effective at the moment of completion of the process of production of goods and services (current production prices of the manufacturer), without VAT and excise. Output in trade, intermediary activity, electricity and gas supply, is determined as the difference between the cost of the realized goods (services) and their sale price. Total output should include incomplete production or output, which has not reached the product parameters (e.g. in construction, winery, cattle-breeding, etc.). It should also include changes in volumes of the half-finished products produced for the own consumption in the process of manufacturing the finished products and the income from the leasing of the property. Value of incomplete production should be estimated according to the production cost within the given period of time plus expected profit rate.

### 2. OPERATION COSTS (PRODUCTION, SUPPLY, GENERAL AND ADMINISTRATIVE COSTS)

| | | | |
|---|---|---|---|
| Expenses for procurement of goods and services intended for realization | 210 | | Procured goods and services that were re-sold unchanged in shape and features during the year. Index will be calculated according to the price of purchase without VAT and excise. |
| Raw materials, purchased component parts and semi-final products | 220 | | Excluding VAT |
| Fuel and Energy | 230 | | Excluding VAT |
| Expenditures accrued for the reimbursement to the external organizations or individuals for the services provided. | 240 | | Communications, transportation, advertisement, repair and other costs, without VAT. |
| Rent | 250 | | Excluding VAT |
| Reimbursement for labor to the employed personnel | 260 | | Reimbursement for labor (salary, bonus, supplement, vacation supplement) that was paid to the personnel (including income tax) or given in the form of the final products during the year. |
| Of which reimbursement to female personnel | 270 | | Reimbursement for labor (salary, bonus, supplement, etc), paid to employed women or given in the form of the final products during the year. |
| Social tax accrued | 280 | | Social tax, at a rate of 20%. |
| Accrued depreciation of the capital assets used during the current production. | 290 | | Depreciation rate of the capital assets (excluding nonmaterial assets) used in the production within the accounting period. Depreciation of those capital assets that did not participate in any way in the process of production by the enterprise within the accounting year will be indicated in the line 35th. Sum of these two lines should equal to the 5th column of the 550 line of the C module. |
| Taxes and duties included into the cost of production | 300 | | Property tax and other taxes. |
| Other operational costs, describe _____ | 310 | | Costs of the products (goods, services), manufacturing and realization that could no be classified in the 220-300 lines. |
| **Production Costs, Total** | 320 | | 220+230+240+250+260+280+290+300+310 |



### 3. NON-OPERATIONAL AND CONTINGENCY INCOMES AND EXPENSES

| | | | |
|---|---|---|---|
| Nonoperational and Contingency Incomes, Total | 330 | | Non-operational and contingency incomes include incomes from interest, dividends, income from other financial investments, income accrued from the sales of the capital and working funds, difference on exchange rate and other non-operational incomes. |
| Nonoperational and Contingency Expenses, Total | 340 | | Non-operational and contingency expenses include expenditures on interest, remainder cost from the realized and written down capital assets and working funds (volume of the decreased remainder cost of the asset as a result of this operation), accrued depreciation of the capital assets no used during the current production, difference on exchange rate, etc. |
| Of which, accrued depreciation of the capital assets not used in the current production | 350 | | |

### 4. SUBSIDIES

| | | | |
|---|---|---|---|
| Subsidies for production | 360 | | Subsidies related to the production shall be indicated: subsidies for reimbursement for labor and labor resources, environment protection. However investment subsidies should not be included here. |
| Subsidies on Products | 370 | | Subsidies for products, i.e. subsidies directly connected to the turnover that were accrued proportionally to the volume of production. |

### 5. PROFIT, LOSS

| | | | |
|---|---|---|---|
| Total accrued in production: profit (+), Loss (-) | 380 | | 200+330+360+370-320-340<br>Accrued profit or loss for the economic year shall be given, calculated based on the output produced. |
| Factual in the production year: Balance Profit (+), Loss (-) | 390 | | Actual balance profit (gross) or loss. |

### PART III. INVESTMENTS (FINANCIAL AND NONFINANCIAL)

| | | | |
|---|---|---|---|
| Investments into the financial and nonfinancial (capital and working) assets, Total | 400 | | This part includes: financial and nonfinancial (intended to increase financial assets and/or made in order to fulfill liabilities) investments into the enterprise, made using the own financial resources or the resources attracted from other entities or in the form of the transfer of property directly to the enterprise. Pure increase in the unfinished production or in stock of the final products is also attributed to the investments into the working resources of the enterprise; this part also includes financial means received from the emissioned bonds or realization of other securities. |
| Of which for the capital assets | 410 | | This line should be equal or less than columns 1+2+3 of the 330 line in the module C. |

### PART IV. EMPLOYMENT

| Description of Indicators | Code | Total (Show in rounded figures) | Code | Of them, Females (Show in rounded figures) | Comments |
|---|---|---|---|---|---|
| **Annual average number of employed individuals[1], total** | 420 | | 430 | | Average number of employed individuals (employees, employed founders and employed family members - in the case of family business) during the year. |
| Number of employed individuals | 440 | | 450 | | Employees of the enterprise on the basis of the labor agreement i.e. contract that have accrued wages. |
| Number of hours worked (thousand man-hours) | 460 | | 470 | | Number of hours worked during the fixed working day and over time. If it is impossible to determine the exact number of the hours worked, apply the estimation approach. |

[1] - During calculation of the annual average number of employed individuals for those employed that worked in the enterprise only during concrete period of time, average annual rate should be calculated by correlation of number of days (weeks, months) against the whole year (unemployed personnel due to annual leave, sickness, temporary stop over of the enterprise).

Line 140 of the Part II shows the reported turnover of the enterprise, while line 200 points to the total output. Apart from these indicators, enterprises provide information for other indicators, which were not included in this survey. In addition to the main part, the survey includes three appendices (A, B and C) annexed at the end of this report.

The following questionnaire was used to determine expenditures incurred by the enterprises for the construction, maintenance and repairs and restaurants' services:

**ASSESSMENT OF THE NONOBSERVED ECONOMY IN THE SECTORS OF CONSTRUCTION, REPAIRS AND RESTAURANTS**

**QUESTIONNAIRE 04-01-(02)**

APPROVED BY THE DECREE OF THE CHAIRMAN OF THE DEPARTMENT OF STATISTICS - UNDER- AUTHORITY ORGANIZATION OF THE MINISTRY OF ECONOMIC DEVELOPMENT OF GEORGIA

☐ ACCORDING TO THE FIRST PARAGRAPH OF THE 11TH CLAUSE OF THE LAW ON STATISTICS OF GEORGIA, ENTERPRISE SHALL PROVIDE TRUTHFUL AND COMPLETE STATISTICAL DATA TO THE DEPARTMENT OF STATISTICS FREE OF CHARGE.
☐ INDIVIDUAL DATA, BEING COMMERCIAL CONFIDENTIALITY, IS CONSIDERED CONFIDENTIAL AND PROTECTED BY THE GENERAL ADMINISTRATIVE CODE AND THE 12TH CLAUSE OF THE LAW ON STATISTICS OF GEORGIA.

**FULL NAME OF THE ENTERPRISE**

**RESPONDENT** _____ Tel.:
(Name, Last Name)

**Interviewer** _____ Tel.:
(Name, Last Name)

**IDENTIFICATION NUMBER UNDER THE STATISTICAL REGISTER**

**IDENTIFICATION NUMBER OF THE TAX PAYER**

**I. EXPENDITURES INCURRED BY THE ENTERPRISE FOR THE PROCUREMENT OF BUILSINGS AND CONSTRUCTIONS AND CONSTRUCTION SERVICES (WITHOUT VAT)**

| Indicator | № | Accounting Period: 2006 year, GEL | Accounting Period: I Quarter of 2007, GEL | Comments |
|---|---|---|---|---|
| **Accrued expenditures for procurement of buildings and constructions**, construction of which was not completed before the accounting period (without registration fees) | 1 | | | Buildings and constructions purchased from the first hand (constructor) directly. |
| **Expenditures accrued for construction of buildings and constructions intended for own use and overhaul and current repair of own buildings and constructions.** | 2 | | | That was not sold out during the accounting period (estimate based on the self-cost, including the cost of the raw materials and goods used). |
| **Expenditures accrued for the services of the external construction organizations and individuals** (workers, craftsmen). | 3 | | | Line. 3 ≤ Line.2 |

**II. EXPENDITURES OF THE ENTERPRISES ACCRUED FOR THE RESTAURANTS' SERVICES (WITHOUT VAT)**

| | | | | |
|---|---|---|---|---|
| **Expenditures accrued for the services of restaurants, bars, canteens and suppliers of the ready food.** | 4 | | | |

**III. EXPENDITURES OF THE ENTERPRISES ACCRUED FOR MAINTENANCE (WITHOUT VAT)**

| | | | | |
|---|---|---|---|---|
| **Expenditures accrued for maintenance, Total** (except for repair of buildings and constructions). | 5 | | | line 5 = line (6+7+8) |
| Of which: | | | | |
| Expenditures accrued for the technical service and maintenance of vehicles and motorcycles. | 6 | | | |
| Expenditures accrued for the repair of the office appliances | 7 | | | |
| Expenditures accrued for the repair of other enterprise equipment | 8 | | | |
| **Expenditures accrued for the services of the external maintenance organizations and individuals** (workers, craftsmen). | 9 | | | line 9 = line (10+11+12)<br>line 9 ≤ line 5 |
| Of which: | | | | |
| Expenditures accrued for the technical services and maintenance of vehicles and motorcycles | 10 | | | line 10 ≤ line 6 |
| Expenditures accrued for the repair of the office appliances | 11 | | | line 11 ≤ line 7 |
| Expenditures accrued for the repair of other enterprise equipment | 12 | | | line 12 ≤ line 8 |

The first part of the questionnaire is related to the expenditures incurred for construction, the second refers to the expenditures for the restaurants' services, and the third – expenditures for the maintenance and repair services.

As mentioned in the methodology part of the report, expenditures incurred in favor of the external organizations for construction and technical maintenance and services are given separately.

From the consumption point of view, expenditures for construction are calculated by summing up all three lines of the first part.

For calculating eexpenditures incurred for the maintenance and repair, lines 6, 7, 10 and 11 are added.

The following questionnaire was used to determine expenditures incurred by the enterprises for the construction, maintenance and repairs and restaurants' services:

Ministry of the Economic Development
Department of Statistics

ADDRESS: 4 PEKINI STR., 0115 TBILISI
TEL.: (995 32) 33 70 33/33 40 96
FAX: (995 32) 33 22 70/33 70 33
E-mail: info@statistics.gov.ge
Web site: http://www.statistics.ge

**Survey of the non-observed economy in the sectors of construction, repairs and restaurants**

**QUESTIONNAIRE N 04-01-(01)**
APPROVED BY THE CHAIRMAN OF THE DEPARTMENT OF STATISTICS - UNDER - AUTHORITY ORGANIZATION OF THE MINISTRY OF ECONOMIC DEVELOPMENT BY THE DECREE DATED MARCH NOO 2007

Individual data of the respondent is confidential and can not be published or transferred to the third party according to the General Administrative Code of Georgia and the 12th clause of the Law on Statistics of Georgia.

District of the survey _____ Interviewer_____

Household _____Supervisor_____

To the attention of the Interviewer: Please inquire the head of the family, or the person who takes decision together with the head of the family and is informed about the family expenses. Make an introduction on the first place and briefly explain the goals of the survey. In order to fully assess and analyze the country economy the Department of Statistics with the support of the United Nations Development Program (UNDP) conducts a special survey of the economy sectors. Answers provided will help us a lot in achieving this goal successfully.

We Thank You in Advance for the Cooperation!

**Part I: Construction**
Have you carried out any type of construction or repair works over your main place of residence or other buildings and constructions (summer house, garage, fencing of the yard, winery „marani", etc) being under your property in 2006? (Please mark)

*1.Constructing: (mark) more than one answers allowed.*
a)Yourself
b)Hired craftsmen
c)Addressed construction firm
(mark) more than one answers allowed

New house (residence)
Other building, construction or shed
Extension
Arrangement of the yard, fencing
Other types of construction (explain)_____
No, no construction took place

To the attention of the Interviewer: Do not include minor works like repair or replacement of switches or tabs to the second question. If the respondent answered 1.6. and 2.8 appropriately, respectively to the 1st and 2nd questions, continue with the 6th question.

*2.Did you carry out repair, extension , reconstruction or dismantling (mark) more than one answer is allowed.*
a)Yourself
b)Hired craftsmen
c)Addressed construction firm
(mark) more than one answers allowed

Building or construction
Electricity supply
Water supply
Heating system
Repair of roof or other external repairs
Surfacing (tiles, etc)
Other (explain) _____
No, no works of such kind took place

*3.What kind of expenditures have you incurred in 2006 for the mentioned repair or construction works (including construction materials, transportation, construction companies, services of the workers and craftsmen)? (Please estimate the earlier purchased construction materials in current estimated average prices. Do not include purchased, but not used materials)* _____ GEL

*4.Out of the indicated amount, what is the share of expenses covering services of workers, craftsmen (constructor, sanitary technician, technician, assembler, loader), construction organizations?* _____ GEL

*5.Please assess the cost of your own labor during your own construction (repair) work (assess according to the estimated cost rate of workers' services).* _____ GEL

*6.Did you purchase during the year 2006, any building or construction completed or still under-construction in 2006 (house, apartment, summer cottage , shed, or other type of the capital construction) directly from the constructor (first hand)?*
Yes (please continue)
No (move to the II part);

*7.What is the total amount charged (despite this, have you paid the amount fully or partially)*
Appartment of house _____ _____ GEL Other buildings or constructions _____ GEL

**Part II: Repair of vehicles, home appliances or articles of personal use**

To the attention of the Interviewer: Please interview each member of the family who is the main owner of the vehicle. If the person was not at home, ask when is it possible to see him/her. Interview that person at the second visit. If the respondent could not be interviewed during the second visit, ask the family member about the approximate cost of the vehicle and the related expenses.

*8.Does your family possess a vehicle and whether any of the members of your family drives other's vehicle or any other type of the transport? (Mark)*
Yes (continue)
No (move to question 13)
How many functioning vehicle or other means of transport do you possess? (record)_____ units

*9.Type of the vehicle:*
Automobile
Minivan not exceeding 3 tones in weight
Microbus intended for transportation of humans
Bus for over 20 passangers;
Track or tracktor

*10.Car information (other vehicle):*

| | | | |
|---|---|---|---|
| Year of manufacturing: | 1. _____ | 2._____ | 3._____ |
| Kilometers run: | 1. _____ | 2._____ | 3._____ |
| Brand and model: | 1. _____ | 2._____ | 3._____ |

*11.Whom do you usually address for the technical service and maintenance of your vehicle? (mark)*
a)In majority cases to the repair shop (registered legal or physical body)
b)Craftsman, technician
c)Fix the problem myself

*12. Please recall the volume of expenses incurred for the technical service and maintenance of your transport means (including spare parts and materials): Please record the cost of services and maintenance, despite the mode of payment -, in advance, after completion of service, postponed or free of charge (please estimate your own efforts based on the current market prices).*

| Type of the service | Code | 1st Quarter of 2007, GEL | | 2006, GEL | |
|---|---|---|---|---|---|
| | | 1st vehicle | 2nd vehicle | 1st vehicle | 2nd vehicle |
| External elements: lighting, doors, windscreen, bumper | 12.01 | | | | |
| Repair of the tires, equilibration | 12.02 | | | | |
| Internal elements: suspension, wheel chocks, breaks, ignition system, electric wiring; | 12.03 | | | | |
| Main elements: engine, engine basic block, shafting; | 12.04 | | | | |
| Anticorrosion treatment of the car body, colouring | 12.05 | | | | |
| Other technical service and maintenance | 12.06 | | | | |
| Simple technical service, except repair of the electric wiring, tires and car body | 12.07 | | | | |
| Total Expenditures | 12.08 | | | | |

*13. Whom do you usually address in case repair of home appliances or articles of personal use is needed?*
a) In majority cases to the repair shop (registered legal or physical body);
b) Craftsman, technician;
c) Fix the problem myself;

*14. Please indicate approximate expenditures incurred for the technical service and repair of the home appliances and articles of personal use (including spare parts and materials)*

Please record the cost of services and maintenance, despite the mode of payment -, in advance, after completion of service, will be postponed or free of charge (please estimate your own efforts based on the current market prices).

| Indicator | Code | 1st Quarter of 2007, GEL | 2006, GEL |
|---|---|---|---|
| Repair of radio, audio, TV and visual equipment | 14.01 | | |
| Repair of refrigerators, washing machines, vacuum cleaners, floor-polishers | 14.02 | | |
| Lighting equipment, gas stove, gas heaters, water heaters | 14.03 | | |
| Repair of the electric heaters, air conditioners, irons and other electric equipment | 14.04 | | |
| Repair and restoration of furniture | 14.05 | | |
| Repair of telephones (including cellular phones) | 14.06 | | |
| Repair of shoes | 14.07 | | |
| Repair and alteration of clothes | 14.08 | | |
| Repair of bicycles | 14.09 | | |
| Washing and restoration of carpets | 14.10 | | |
| Tuning and restoration of pianos and other musical instruments | 14.11 | | |
| Repair of clocks | 14.12 | | |
| Repair of jewellery | 14.13 | | |
| Repair of suitcases, bags, etc. | 14.14 | | |
| Total expenditures: | 14.15 | | |

**Part III. Restaurants, bars, cafes and other places of food and leisure.**

*15. How many members are there in your family?*
*(please include everybody who shares the living space, contributes to the family income and expenses)*

Start listing from the head of the family

| # | Name | Gender: 1– Females, 2– Male | Age |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |

To the attention of the interviewer: Interview separately each family member older than 15 years of age. If any of them can not be met even during the second visit, please complete the Refusal Form. Total amount to be paid by the family should be included in the form of the family head. Head of the family should respond to the questions about the expenses of adolescents (younger than 15). Survey covers trade by ready food, including beverages, to be consumed on site, sometimes accompanied by the entertainment program in the: restaurants, cafeterias, fast food units, restaurants with take-home services, cafes, railway catering cars, and other objects of travelers' service.
Survey does not cover entities that do not foresee food consumption on site at least partially.

Name of the family member 1._____
Have you consumed any of the listed services during the given period of time and what expenses have you personally incurred?

| Indicator | Code | Expenses during the last week (GEL) | Expenses during the last month (GEL) |
|---|---|---|---|
| Restaurant | 01 | | |
| Café | 02 | | |
| Bar | 03 | | |
| Night Club | 04 | | |
| Canteen, catering car | 05 | | |
| Readymade food supply (by order) | 06 | | |
| MCDONALDS | 07 | | |
| Other fast food | 08 | | |
| Children's entertainment center | 09 | | |
| Space rent, including the locally available service[1] | 10 | | |
| Space rent, excluding the locally available service | 11 | | |
| Ritual service entities (e.g. banquet room) | 12 | | |

Name of the family member 2._____
Have you consumed any of the listed services during the given period of time and what expenses have you personally incurred?

| Indicator | Code | Expenses during the last week (GEL) | Expenses during the last month (GEL) |
|---|---|---|---|
| Restaurant | 01 | | |
| Café | 02 | | |
| Bar | 03 | | |
| Night Club | 04 | | |
| Canteen, catering car | 05 | | |
| Readymade food supply (by order) | 06 | | |
| MCDONALDS | 07 | | |
| Other fast food | 08 | | |
| Children's entertainment center | 09 | | |
| Space rent, including the locally available service[1] | 10 | | |
| Space rent, excluding the locally available service | 11 | | |
| Ritual service entities (e.g. banquet room) | 12 | | |

Name of the family member 3._____
Have you consumed any of the listed services during the given period of time and what expenses have you personally incurred?

| Indicator | Code | Expenses during the last week (GEL) | Expenses during the last month (GEL) |
|---|---|---|---|
| Restaurant | 01 | | |
| Café | 02 | | |
| Bar | 03 | | |
| Night Club | 04 | | |
| Canteen, catering car | 05 | | |
| Readymade food supply (by order) | 06 | | |
| MCDONALDS | 07 | | |
| Other fast food | 08 | | |
| Children's entertainment center | 09 | | |
| Space rent, including the locally available service[1] | 10 | | |
| Space rent, excluding the locally available service | 11 | | |
| Ritual service entities (e.g. banquet room) | 12 | | |

Thank you for cooperation!

In case of refusal from the household's side, a special Non-Response Form was elaborated, which contained the reason for refusing.

**Household Non-Response Form**

Region ..... (Region Code).....

Survey district # ..... Interviewer ..... (First Name, Last Name)

Household # ..... Supervisor .....(First Name, Last Name)

Interview failure codes:

*Live in the house, but*

1.Refused to be interviewed
2.Nobody was at home
3.Family member who has the information on family expenditures was not at home
4.Are away temporarily (for several weeks, months or seasonally) to other region of Georgia
5.Are temporarily abroad (for several weeks, months or seasonally)
6.Other reasons (explain) .....

*Nobody lives in the house:*

7.Residents moved to other place, other region, inside Georgia
8.Residents moved abroad
9.Resident passed away
10.Other reason (explain) .....

*There is no dwelling space at the given address (any more):*

11.Nonexisting address
12.Appartment (house) is abolished or can not be used as a living space because of its'emergency condition
13.Appartment (house) is not used as a living space (rearranged into the different object)
14.Other reason (explain) .....

The following Non-Response Form was used for the cases of refusal by the enterprise:

Enterprise Non-Response Form

FULL NAME OF THE ENTERPRISE _____

INDIVIDUAL CODE OF THE ENTERPRISE _____

RESPONDENT _____ TEL: _____
(First Name, Last Name)

INTERVIEWER _____ TEL: _____
(First Name, Last Name)

IDENTIFICATION CODE OF THE STATISTICAL REGISTRY

IDENTIFICATION NUMBER OF THE TAX PAYER

| | | | |
|---|---|---|---|
| REGION | 1 | _____ (Please indicate) | Code of the Region |
| TYPE OF THE MAIN ACTIVITY | 2 | _____ (Please explain in details) | |

1. Refused to respond
2. Owner of the enterprise or the other informed person could not be seen
3. Operation is temporarily seized
4. Listed enterprise could not be found at the given address
5. Other (record)

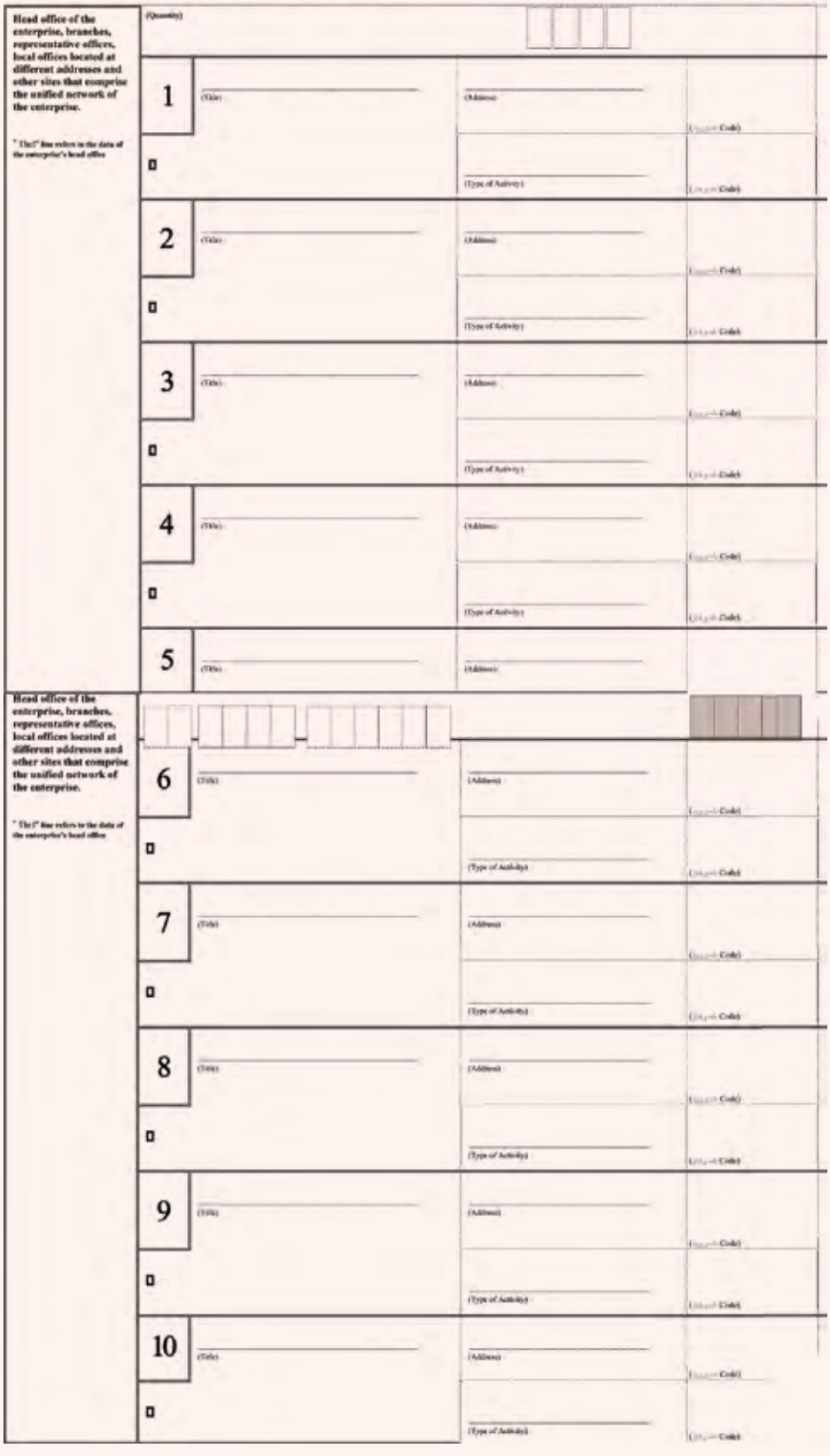
**MODULE A. PRODUCTS AND SERVICES**

Should be completed only for the enterprises whose sphere of activity (primary or secondary) is: mining industry, processing industry, generation and distribution of the electricity, gas and water.

Please describe the types of products in the separate lines

| | | | | Quantity |
|---|---|---|---|---|
| 1 | _____ (Title) | | (Unit of Measurement) | |
| 2 | _____ (Title) | | (Unit of Measurement) | |
| 3 | _____ (Title) | | (Unit of Measurement) | |
| 4 | _____ (Title) | | (Unit of Measurement) | |
| 5 | _____ (Title) | | (Unit of Measurement) | |
| 6 | _____ (Title) | | (Unit of Measurement) | |
| 7 | _____ (Title) | | (Unit of Measurement) | |
| 8 | _____ (Title) | | (Unit of Measurement) | |
| 9 | _____ (Title) | | (Unit of Measurement) | |
| 10 | _____ (Title) | | (Unit of Measurement) | |

## MODULE B. UNITS OF THE LOCAL ACTIVITY TYPES



## Module C. Turnover of the Capital Assets

(GEL)

| Indicators | | Income during the year | | | Spent during the year | | | Remainder (reproducible) value | |
|---|---|---|---|---|---|---|---|---|---|
| | | Newly created or purchased (not exploited before) | Spending on major repair | Other income | Write off | Depreciation | Other spending | Beginning of the Year | End of the Year |
| a | a | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Buildings and Constructions | 480 | | | | | | | | |
| Vehicles and Equipment | 490 | | | | | | | | |
| Cultivated Assets | 500 | | | | | | | | |
| Non-material Capital Assets | 510 | | | | | | | | |
| Valuables | 520 | | | | | | | | |
| Non-productive Tangible and Intangible Assets | 530 | | | | | | | | |
| Of which Land | 540 | X | X | | X | X | | | |
| Capital Assets and Non-productive Assets, Total (480+490+500+510+520+530) | 550 | | | | | | | | |
| Unfinished Buildings and Constructions from the line 480 | 560 | | | | | | | | |

**Instructions for filling out Module C.**

Module C of the form is dedicated to the turnover data of the capital assets during the year.

Column 1 of the Module C shows the cost of the capital assets created (built or purchased) during the accounting year that have not been exploited earlier on the economic territory of the country. The same column includes expenditures incurred for re-registration of the land and the capital assets that have been exploited in the past on the economic territory of the country (main expenditure incurred for procurement should be recorded in the column 3).

Column 2 – expenditures for the major repairs of the capital assets, as well as expenditures for the substantial enrichment of the land (e.g. cultivation costs).

Column 3 – Purchase of the capital assets (buildings, constructions, equipment, etc.) that have been exploited on the economic territory of the country, that have taken place during the accounting year.

Column 4 – Remainder value of the liquidated (written off) capital assets during the accounting year.

Column 5 – Accrued depreciation of the capital assets during the year.

Column 6 – Spent capital assets (buildings, constructions, equipment, etc.) during the year, through sales, free of charge transfer to the physical or legal entities, including the transferred assets from the capital into the working category.

Column 7 – Enterprises record the remainder (reproducible) value of the capital assets for the moment of the beginning of the year.

Column 8 – Enterprises record the remainder (reproducible) value of the capital assets for the moment of the end of the year.

Line 480 should indicate the buildings and constructions: residential buildings – buildings that are permanently or temporarily used as a living space. These include any additional constructions (garage, boilers, etc.). Also non-residential buildings and constructions, including internal equipment and aggregates that represent the indivisible part of such buildings.

The same line shows unfinished buildings and constructions, if transferred under the ownership of the final consumer, either are constructed for the own consumption, or on the basis of the existing sales contract.

Line 490 indicates vehicles, aggregates, equipment or transportation means; Equipment and aggregates that are considered to be an indivisible part of the building should be excluded. Not installed aggregates and equipment should be recorded on the same line.

Line 500 includes cultivated assets i.e. productive or labor stock, multiyear plants that are continuously or repetitively used for receiving the products, such as milk, fruits, etc.

Line 510 indicates produced non-material assets. These include: useful mining exploration or other geological investigation reports; software; original (unique) pieces of literature and arts; other intangible assets.

Line 530 includes non-financial assets that do not represent the result of the production process. This line also includes land and other natural created resources, licenses, concessions, contracts, goodwill.