MONSTAT

A PICTURE OF MONTENEGRIN ECONOMY PROVIDED BY THE NATIONAL ACCOUNTS

This publication has been produced in the frame of an
EU-funded project managed by the European Agency for Reconstruction
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Support to the Statistical Office of Montenegro
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Foreword

The signature of the Stabilization and Association Agreement with the European Union on 15th October 2007 opens up a fantastic opportunity for progress in all fields of our social and economic lives. Yet, the frame it defines for further EU membership negotiations represents an important challenge for official statistics which must be harmonized with EU standards in order to become useful for an assessment of our national policies.

This first publication regarding National Accounts in Montenegro thus comes at the right moment since it provides a complete overview of the current Montenegrin framework for economic analysis and on how far it needs to be further improved to satisfy harmonization with EU requirements.

While working on this publication, our Office has invested a great deal of effort to avoid unnecessary jargon and to explain this complex issue of National Accounts in the most accessible way. Only a full and accurate understanding on the part of all our users - policy-makers, researchers, economists, journalists, business leaders – of the scope and meaning of national accounts aggregates, the measuring and interpretation of the GDP in particular, can lead to detailed analysis, debate and decisions. The general public will find herein all of the methodological explanations they require, while more knowledgeable and experienced readers will easily make the link with the main international official reference manuals they know such as SNA93 or ESA95.

Apart from this effort at clarity, this publication is also the first attempt to properly measure the characteristics and dynamics of the Montenegrin economic sectors within the framework of the market economy, and to analyse the available results. The work, however, has not finished there, and MONSTAT is strongly committed to pursue its progress to accumulate more information and develop additional instruments to assess our economy. We are aware that many gaps remain in basic data sets, that constant price estimates should progressively include upgraded methodology as soon as new price indexes are introduced, and that analysing short-term dynamics requires the development of Quarterly National Accounts.

Despite the identified shortfalls, I would like to congratulate all the members of MONSTAT on having contributed to this difficult but essential work. My gratitude also goes, of course, to all those who provided them with help at every methodological and analytic step, to Enrico D'Elia, the coordinator of this publication, and to the experts from the Hungarian Statistical Office who shared their knowledge and experience in order to upgrade our GDP compilations in current prices.

The results achieved are placed in a much larger context, in which the EU granted funds to support an important project aimed at improving our GDP. Eurostat, as technical adviser, the Italian National Institute of Statistics ISTAT, as leader of a consortium involving the statistical Offices of Hungary and of Sweden, and the European Agency for Reconstruction, as manager of this project, have all provided a most valuable contribution to the improvement of Montenegrin statistics.

I would like to take this opportunity to express my highest gratefulness to the staff of ISTAT local Office that gave us the most valuable support throughout the project implementation phase.

It is now up to the readers to evaluate this publication and to express their needs and wishes for further developments, and MONSTAT warmly welcomes any feedback from its most important partners: the users of official statistics.

Ilija Stanisic, Director

1. Introduction

The system of national accounts aims at measuring social well-being, at least in the part related to economic transactions between households, businesses, general government and the rest of the world. National accounts estimates have an outstanding advantage over all other available standard statistical indicators, since they are the only ones that provide a consistent and coherent set of data, able to make a synthesis from theoretically available information regarding economic transactions and the financial situations of economic agents. In doing so, national accounts also provide guidelines to reshape and improve the system of statistical surveys. Hopefully, they will also make available a common consensus framework for public debate on economic policy.

In order to gain a full and accurate understanding of the meaning and scope of national accounts estimates a high degree of technical knowledge and experience is required. Thus the sole aim of the present publication is to provide the general public, policy makers, researchers, economic analysts, journalists and students, etc. with a simple guide to the intriguing and tricky world of national accounts. Of course, interested readers are invited to go into the details of the methodology of national accounts thoroughly by referring to the official handbooks and other technical publications.

The most important item included in the system of national accounts is the gross domestic product (GDP). From an economic point of view, it measures the amount of goods and services which, added to imports from abroad, may be utilized for "final" uses, that is: consumed privately by households, provided by the government as public services, invested (i.e.: used to restore and improve buildings, machinery and the like), stored as inventories or exported.

Nevertheless, national accounts neglect a number of factors which undoubtedly influence the actual standard of living, such as the quality of air and water, social cohesion, economic inequality, education level and life expectancy, etc. even though all of them can be influenced by economic activity. So that Robert Kennedy once ironically observed that the GDP "measures everything, in short, except that which makes life worthwhile".

The system of national accounts following the standard of the System of National Accounts 1993 (SNA 93), which is the basis of modern national accounting, further developed by the European System of Accounts (ESA 95), generalises and updates the outdated concept of Social Product (SP), adopted for some considerable time in centralized economies. Both standards take into account the production and use of material goods. The main difference between the GDP and SP is that the former also includes the value of many services provided directly to the people (such as housing, education and health services, etc.), while SP only included those services related to transport and commerce. In fact, SP regarded other services as a form of income redistribution. On the other hand, the GDP is computed after having subtracted the value of the services employed by firms within the production process (such as engineering, advertising and banking, etc.).

Adopting the new standard of national accounts, instead of the outdated system of indicators on social product, is not only a purely methodological issue since it marks the transition of Montenegro toward a functioning and modern market economy. Indeed, the main advantage of the new system is taking proper account of the characteristics and the dynamics of the most innovative and fastest growing sector of the Montenegrin economy, i.e. services. Only by correctly measuring the activity of this branch is it possible to describe and explain the overwhelming improvement in the economic structure and the standard of living of Montenegro in the last few years.

National accounts also differ from usual business accounts, even though the latter provide a fundamental source of information for the estimation of national accounts. Nevertheless, the items of national accounts cannot be calculated by merely summing up the data from individual financial reports, since the first aim of business accounts is to determine a company's net profit and wealth, while national accounting focuses on the productive capacity of the national economy and on the way value added is distributed among the different subjects.

An important part of national accounts is the estimation of the GDP and other aggregates evaluated at "constant prices", which is done by using prices not existing on the actual market. The aim of constant price estimation

(or "deflation") is to describe the evolution of the "physical" flows of goods and services in a way that they are depurated from the effects of pure price changes, which simply "blow up" the figures at current prices rather than corresponding to an improvement in the standard of living.

Another characteristic of modern national accounts is the possible occurrence of data revisions, and even of the retrospective revision of data concerning some past years. This feature of national accounts may generate confusion among users, but is a necessary result of producing timely estimates, even if they are based on incomplete information. However, revisions should not be considered a drawback of the system, but rather one of its strongest characteristics, since they insure that the accuracy of national accounts improves as soon as information improves.

This publication consists of three main parts in addition to the introduction. The following section aims at describing the general framework of national accounts, but those readers interested in very technical details should refer to other publications from the Statistical Office and International Organizations on this topic. The third section describes in short the structure of accounts, and focuses on the definition of the main items of national accounts. The fourth section of this publication presents a picture of the Montenegrin economy provided by national accounts. In fact, the estimates regularly provided by the Statistical Office allow for the measuring of the structure and the evolution of the supply and demand. Moreover, the compliance of Montenegrin national accounts with international standards allows some comparisons to be made between the structure and the dynamics of other economies, both within the Balkan region and the rest of Europe. Some conclusive remarks close the publication.

2. The conceptual framework of national accounts

The system of national accounts is an international standard which defines specific concepts and variables and provides the rules on how to measure them in compliance with a well established methodology. The actual system is devised to describe the main economic facts both in countries with a market economy and in those still in transition toward a fully functioning market economy. Integrated national accounts provide a comprehensive picture of the economy, which facilitates understanding of the economic relations among economic subjects and the structure and dynamics of the main aggregates describing the economic development.

Formally, the system of national accounts consists of a set of tables, presented as "accounts", and of classifications and rules, described in detail in two reference manuals: the "System of National Accounts 1993" (SNA93) and the "European System of National Accounts 1995" (ESA95). The SNA93, also known as the "blue book" is the product of the joint work of the most important international economic organizations, i.e.: the United Nations, the International Monetary Fund, the OECD, The World Bank and The European Commission. The SNA93 provides more theoretical frame while the ESA95 includes additional details in order to come closer to the European environment and practices. EU member countries have a legal obligation to follow the ESA95 in their statistical practices.

First of all, the system of national accounts serves to support macroeconomic analysis by identifying the relationships between the economic aggregates, but also to distinguish the role of each productive sector and the one of every category of economic actor in the development process. Of course, a full assessment of the economic situation is the necessary premise to design and implement any effective macroeconomic policy.

Indeed, every country holds a large amount of statistical data on economic activity, but considering such data independently does not help to gain a clear picture of the economic situation. Thus, national accountants have to make use of an internationally approved methodology to group existing statistical data into a unique and integrated set of indicators. It is worthwhile to note that the integration does not derive from a simple sum of lower level indicators, but rather from a complex calculation aimed at extracting information from different, and possibly inconsistent, sources.

In order to achieve the former goals, the system of national accounts relies on a small number of basic concepts including, in particular:

- the value added (and the related notions of output and intermediate consumption);
- the component of final demand (or final uses);
- the institutional units;
- the distinction between stocks and flows;
- the accrual accounting principle, as opposed to pure cash accounting;

In addition, the system relies on some fundamental defining equations, which ensure the internal consistency and coherence of the accounts.

2.1. The concepts of output, intermediate consumption and value added

The production process may be explained in the simplest way as an economic activity within which the producers use some inputs in order to make an output, which was unavailable until then. Of course, it is necessary to specify in an operational way what "input" and "output" are within the process. Economic analysis defines whatever is delivered to other subjects (more formally, to another "institutional unit") or produced for serving their needs as output.

Market output is composed of goods and services sold on the market at economically significant prices (i.e. a price covering more that half of the total production costs) or whose availability on the market is planned for the near future.

Outputs may be grouped into two main categories: products and services. Products are material (physical) items for which a voluntary demand exists, over which ownership rights may be established and that may be object of

exchange in the market between different institutional units. Services are heterogeneous outputs whose purpose is to change the status of other goods or of the user (e.g. transporting commodities, having one's hair cut, etc.). Contrary to goods, services are available at the moment of production and cannot be stored for future use.

Production concerns goods and services bearing the following characteristics:

- they are created by human work and the use of capital;
- they satisfy human needs, directly as consumer goods, or indirectly as investments, unfinished goods and raw materials;
- they are relatively scarce, thus there is a need to economize them, so that they have an economic value;
- they may be expressed either in monetary terms, through unit prices or in physical terms.

Production is the process of making goods and services available for users by applying some transformation to other existing goods and services, using work and machinery. Thus, it may be conceived as a process which "creates" new value or adds value to previously existing products. Participants in the production process creating and added value are the said factors of production. The production factors are work, land, and capital, in addition to entrepreneurship, which serves to organise all of the aforementioned factors during the production process.

First of all, output includes goods and services subject to market transactions, i.e. they are exchanged at prices reflecting their economic importance from the viewpoint of producers and purchasers. Contrary to services, goods do not need to be exchanged immediately, but may be stored as inventories. Services are provided to specific users, institutional units or groups of individuals or communities. They are delivered to the users immediately after the production has been completed. Finally, some outputs (e.g.: most public services) may be exchanged outside the market, that is for free or at prices which do not reflect the production costs.

2.1.1. Market and non-market production

The concept of production defined in the National Accounts System is more restrictive than the corresponding common sense definition of productive activity. Indeed, according to the SNA93, production is an economic activity that is realized, controlled, and under the responsibility of some institutional units using input for the production of output as final products and services. Unless the human factor participates in the process, the process does not possess the characteristics of a production process in terms of economy. For example, production realized by households whose output is intended for their own consumption is not registered in the production accounts output unless the households are paying staff for particular services. For the same reason, as fish reproduce spontaneously in the sea, they are not produced.

The activities considered "productive" in the SNA93 can be grouped as follows:

- The production of all individual or collective goods and services with the purpose of supplying other institutional units, also including the production of goods and services reused in the production process;
- The production of goods and services for the producers' own needs which are used for the realization of economic activities or for the formation of the owner's capital funds;
- Production in households with the participation of paid workers.

Domestic or personal services produced in households and by household members, which are not included in the evaluation of production aggregates are:

- The cleaning, maintenance and decoration of housing premises
- The cleaning, maintenance and repairing of permanent goods owned by a household (e.g. automobile)
- The preparation and serving of meals
- The bringing up and education of children, etc.

More generally, output consists of products produced during the accounting period (generally one calendar year). The ESA 95 considers three types of productions:

- Market production;
- Goods and services produced by households for their own final consumption;
- Other non-market production

This same division applies to local business units and institutional units, which belong to one of the following categories:

- Market producers;
- Producers for households' own final consumption;
- Other non-market producers.

The difference between these three groups of producers is important because certain principles for output estimation are defined accordingly:

- the market production, household final consumption, as well as the total production of market producers and producers for households' final consumption are evaluated by using market prices, while
- the total production of other non-market producers is estimated from the expenditure side. Other non-market output includes goods and services provided by non-profit institutions serving households or financed by the state, and distributed without charge or at economically irrelevant prices (i.e. covering less than 50% of the production costs).

2.1.2. Illegal activities and the "grey economy"

According to the SNA 93, in some cases, production may be carried out under an illegal form, but in this case distinction is made between two types of illegal production:

- The production of goods and services, whose purchase and distribution is against the law (such as drugs, prostitution, human organs, etc.),
- Production and activities which are illegal or become illegal only if they are performed by the mean of illegal producers (e.g. unqualified health workers) or evade some regulations (e.g. taxes, social contributions, etc.).

For practical (and also ethical) reasons, only the second type of production is included in the overall output, considering that certain investments have been made and that a demand exists. Nevertheless, the omission of illegal transactions also causes imbalances in other parts of the accounts. Therefore, for example, revenue from the production of illegal goods and services has no counterpart in the final uses, but it may be presumed that they are used for consumption or other purposes. Thus, according to the rules of the SNA 93, the purchase of illegal products does not increase the demand, but only savings. This is the case for the production and demand of narcotics, prostitution, illegal abortions, illegal transport in the form of smuggling, etc.

Some activities may be productive in terms of the economy and completely legally performed according to appropriate standards and regulations, but they remain concealed from the authorities for different reasons, including:

- Evasion of taxes on income, value added and sales etc.;
- Evasion of social contributions;
- Evasion of some legal or contractual provisions (minimal wage, maximum working time, etc.).

Such activities belong to the field of the "grey economy" or "non observed economy" even if there is no clear cut distinction between the formal and illegal production. For example, production carried out in unsafe conditions for workers, or not satisfying health or other standards, may be considered illegal.

2.1.3. Intermediate consumption

Intermediate consumption consists of goods and services used as input in the production process, besides fixed capital (equipment, machinery, etc.) which is treated as depreciation (fixed capital consumption).

According to the SNA93 rules, intermediate consumption must be evaluated at purchasing price.

It is worth noting that the goods or services considered as intermediate consumption may be either transformed or used during the production process. Some inputs are transformed and incorporated into the outputs several times (such as grain may be transformed into flour which in turn may be transformed into bread). Other inputs are completely consumed or used up; for example, electricity and most services.

Intermediate consumption does not include the costs incurred by the gradual use of fixed assets owned by the enterprise. It also does not include some items usually included in business accounting as costs, such as interests paid on loans.

2.1.4. The value added

The gross value added is the balance between output and intermediate consumption. It may be estimated for each business, productive sector, or institutional unit. The net value added is the difference between the gross value added and fixed capital consumption, which corresponds only partially to the so called "amortization" in business accounting.

It is important to note that the output of goods and services may be evaluated either at full market prices, or net taxes on products taking into account possible subsidies. However, in practice, the producers report the value of their output excluding taxes which are to be reverted immediately to the public administration (since the producers cannot determine the corresponding amount themselves), while they also include in the value of output the subsidies on products possibly received for production. On the other hand, in reporting the value of inputs, the same subjects are only able to evaluate the full (actual) price of goods and services used as intermediate consumption, without distinguishing between taxes and subsidies. Thus, in estimating value added in practice, value added by NACE sector turns out to exclude taxes on products and to include subsidies twice (i.e. as a component of output and as a reduction of input). As a consequence, it is necessary to add a corrective item (i.e. the difference between taxes on products and subsidies) in aggregating the value added across the different branches of economic activity.

2.2. The economic interpretation of the GDP

The gross domestic product (GDP) is the aggregate provided by the national accounts which is most important and most frequently used as a summary item representative of economic development. The GDP is usually estimated on an annual basis in monetary value. It comprises the value of all the finished goods and services produced within a country's territory "added" to intermediate inputs by using work, capital and entrepreneurship.

More formally, the SNA 93 states that:
"Gross domestic product (GDP) at market prices represents the final result of the production activity of resident producer units. Basically, GDP is a concept of value added. It is the sum of gross value added of all resident producer units (institutional sectors or, alternatively, industries) plus that part (possibly the total) of taxes, less subsidies, on products which is not included in the valuation of output. Gross value added is the difference between output and intermediate consumption. Next, GDP is also equal to the sum of the final uses of goods and services (all uses except intermediate consumption) measured in purchasers' prices, less the value of imports of goods and services. Finally, GDP is also equal to the sum of primary incomes distributed by resident producer units."
(Sections 2.171 – 2.174)

The GDP also measures the amount of goods and services which, added to imports from abroad, provides the total resources which may be used for the following "final" uses:

- the private consumption of households;
- general public services provided by the government;
- the improvement and restoration of fixed capital (i.e. investment in new buildings, machinery and the like);
- inventories;
- exports.

From the viewpoint of accounting, the value added to intermediate inputs corresponds to the sum of gross wage, salaries and profit remunerating national productive factors which "transformed" the intermediate input in the final output.

2.2.1. The GDP and the Social Product

The material product system (MPS) was adopted in Montenegro to estimate the economic wealth of the country until 2003. Similar to the SNA, the MPS is a system of tables or "accounts" providing a number of balancing items measuring different aspects of the economic system. For example, the MPS included the account of production, consumption and accumulation of the gross social product; the account of distribution, redistribution and final use of the gross social product; the account of labor resources and the account of fixed assets.

The MPS classifies economic activities into two spheres: the sphere of material production and the sphere of non-material services. According to the MPS, only the first creates national income while the latter consumes that income. The MPS and its main aggregates (Social Product and National Income) cover only material production (made within industry, agriculture and construction), i.e. the production of material, tangible goods, and a number of "material" services which bring consumer goods from producers to consumers (transport and trade), and provide the maintenance of the capital stock (maintenance and repairs). Non-material services, such as activities of financial intermediation, health, education, administration and defence, business, and personal services, are not treated as productive activities. These sectors are defined as users of national income, i.e. of the surplus created within the sphere of material production. The SNA proceeds from a wider concept of production, which, in addition to material production, includes many other "non-material services".

The basic idea for estimating the Social Product (SP) was that only production activities (industry, mining, agriculture, forestry and construction etc.) produce domestic product, while non-productive activities (education, health, culture, finance and insurance etc.) were only involved in the process of distribution. The SP is calculated as the difference between gross social product (GSP) and material costs (MC), accorging to the following scheme.

2.3. The final uses

According to the SNA93, the total amount of goods and services produced within a country or imported from abroad may be utilised either as intermediate consumption, as an input in the productive process, or for final uses, i.e. to meet households' needs, to improve and increase the stock of fixed capital, and to satisfy the external demand.

It is worth noting that only newly produced goods and services may enter final uses in order to ensure the coherence between the estimate of total resources and that of the final uses. Thus, transactions on second hand goods are not recorded as final uses unless they are imported for the first time (used cars for example).

2.3.1. Final consumption

Final consumption includes goods and services which resident institutional units purchase in order to satisfy human needs, both personal and common. In addition, households provide some goods and services for their own use and utilise them to satisfy their own needs and those of their family members. Services used to satisfy common needs are provided at the same time both to all community members (e.g. justice, defence, etc.) and to a specific part of the community (e.g. education, poorhouses, etc.).

By rule, enterprises do not have final consumption expenditure: only households, government and non profit institutions serving households (NPISH) "consume" available resources.

The SNA93 takes two different notions of consumption under consideration; final expenditure and actual consumption. The first concept refers to consumption directly financed by the unit whereas the second also includes goods and services utilised by the final beneficiary, but funded by somebody else (mainly the government and NPISH).

Household final consumption expenditure includes goods and services used by households to meet their everyday needs (such as clothing, household durables, rent, transport, personal services, etc.), but it also encompasses:

- residential rent services (includes the virtual rents of owner occupied houses)
- transfer in kind (such as: free medicines, housing, etc.),
- some items which would be treated as intermediate consumption if purchased by other units (such as small tools, fuel, etc.),
- some items which are not treated as capital goods only because they are used by households (such as cars, machinery and equipment for gardening, etc.),
- insurance and pension fund services (i.e. not the full premium, but only the part related to the service provided by insurance companies and pension funds),
- medical treatment services
- goods and services purchased at prices which are not economically significant.

NPISH expenditure for final consumption includes:

- Goods and services produced by NPISH, not including investments;
- Goods and services which NPISH purchase from the market and deliver to households as transfer in kind.

Government expenditure for final consumption includes:

- Goods and services produced by the government, not including investments for own consumption and sale;
- Goods and services which the government purchases from market producers and delivers to households as transfers in kind.

2.3.2. Gross capital formation

Gross capital formation includes total gross fixed capital and changes in inventories and valuables.

Fixed assets are tangible or intangible assets produced as outputs which are themselves used repeatedly or continuously in production processes for more than one year. Simple cases are dwellings, other buildings and structures; machinery and equipment. Special cases are cultivated assets (e.g. trees and livestock); intangible fixed assets (mineral exploration, computer software, entertainment, literary or artistic originals); costs associated with ownership transfer (professional services, taxes etc.); major improvements to land (reclamation of land from the sea; forestry clearance; draining of marshes; etc.). Nevertheless, the natural growth of uncultivated forests is not accounted as gross capital formation since it is not produced through the application of work and capital.

The changes in inventories is the value of the increase in the stock of raw materials, finished and unfinished goods less the value of the corresponding reductions which occurred during the accounting period. The stock of inventories particularly varies when selling products which are in stock or when purchasing the same ones, as well as in cases of inflow and reduction of products from stocks conditioned by barter transactions or by received or sent transfers.

Valuables are goods which are not used for production purposes, never age, do not go out of fashion and are kept for the accumulation of value. They are mainly works of art, precious stones, jewellery and other valuables. The value of valuables equals purchases less sales within the accounting period. That amount of valuables is also registered in the capital account.

Gross capital formation includes the consumption of fixed capital (amortization). Amortization may be defined as the depreciation of fixed capital which occurred during the accounting period due to the use of machinery, building and other assets. Amortization does not include the depreciation of fixed capital caused by natural disaster, fire and other emergency situations, since they are not the result of an economic activity.

2.4. The role of institutional sectors

Institutional units are economic subjects that are entitled to possess goods and assets, to incur liabilities and to be involved in economic activities and transactions with other units. A subject is regarded as constituting an institutional unit if it has decision making autonomy in respect to its principal function, so that it would be possible and meaningful, from both an economic and legal viewpoint, to compile a complete set of accounts for it.

Thus, the main characteristics of institutional units are:

- to be entitled to hold goods or assets in its own right,
- to be able to make economic decisions and to engage in economic activities,
- to be entitled to create obligations on its own behalf, to create other duties and contract relations.

In order to provide a picture of the economic situation, the SNA93 takes into account five major groups of institutional units, also belonging to two main categories. The first category is related to individuals, and in the system of national accounts this group is known under the name households. The second category includes all entities determined by law, and they are known as legal institutional units. If an institutional unit is classified under one sector according to methodology there is no possibility of it being reclassified under the others. In other words, institutional sectors are mutually exclusive and together make up the total economy.

The five resident institutional sectors according to type of unit are:

- Non-financial corporations,
- Financial corporations,
- General government
- Households
- Non-profit institutions serving households (NPISH)

In addition, the SNA93 considers the "rest of the world" as a sixth non-residential institutional sector.

Each institutional unit has a "specialisation", as summarised in the following table.

Sector	Typical functions
Non-financial sector	Production of goods and services
Financial sector	Banking, insurance
Government	Tax collection, non-market production, collective consumption, public investment, pensions, subsidies, etc.
Households	Consumption, savings, investment in dwelling
NPISHs	Non market production, transfers

2.4.1. The non-financial sector

This sector includes corporations and other legal entities whose principal activity is the production of goods and non-financial services.

The non-financial sector contains three sub-sectors:

- Public non-financial enterprises
- National private non-financial enterprises
- Foreign controlled non-financial enterprises.

This classification is made according to the kind of institutional units which control them. Government units control public non-financial enterprises in the sense that the government may establish the general policy of the corporation. National private non-financial enterprises are not controlled by the government, but by another resident institutional unit. Foreign controlled enterprises act under the jurisdiction of non-resident institutional units.

2.4.2. The financial sector

This sector consists of all enterprises which are principally engaged in financial intermediation and in other financial activities.

Financial intermediation is the activity in which an institutional unit acquires financial assets and engages in financial transactions on the market. The role of financial agents is to direct funds from those who have a surplus of financial assets to those with a deficit. They direct funds so as to take obligations on themselves, not only by receiving deposits in their own account but also by issuing bonds and other securities.

Financial enterprises are defined as enterprises primarily engaged in financial intermediation and other similar activities. The financial enterprises sector consists of three sub-sectors:

- the banking sub-sector,
- the insurance sub-sector
- others.

Other financial activities are closely related to financial intermediation but they do not constitute financial intermediation themselves.

2.4.3. The Government

The government sector includes all institutional units whose output is intended for individual and collective consumption mainly financed by compulsory payments made by units belonging to other sectors, and all institutional units principally engaged in the redistribution of national income and wealth.

Governmental agencies are legal entities established through the political process and have legislative, executive and jurisdictional power over all other institutional units on a precisely determined territory. As institutional units the governmental agencies provide certain goods or services for the public, collect various taxes from other institutional units and in that way subsidise the activities of the units belonging to this sector. The government sector includes:

- government institutional units,
- social insurance funds
- other institutions.

2.4.4. Households

The households sector includes households as consumers and households as producers of goods and services. Households as consumers are represented by a group of people who share income, wealth and housing and who consume some kind of goods together, mostly referring to food and accommodation. The main source of income of households derives from employee compensation, owners' income, transfers from other sectors or income from managing market activities. It is worth noting that separate members of a household are not considered as separate institutional units since two or more members of the same household share the property and income of other members.

The Households sector includes six subjects:

- Employers,
- Employees,
- Recipients of property income,
- Recipients of pensions,
- Recipients of other transfer income,
- Others.

2.4.5. Non-profit institutions serving households (NPISH)

Non-profit making organizations are legal or social entities established for the purpose of producing goods or providing services to households, to their members (and sometimes also to the government) at economically non significant prices. The SNA93 defines prices as economically significant if they have a significant influence on the amounts the producers are willing to supply and on the amounts purchasers wish to buy. The ESA95 further specifies that output is sold at economically significant prices when more than 50% of the production costs are covered by sales.

In addition, it is considered that, as a rule, enterprises owned by households sell their products to other institutional units at economically significant prices. The main source of revenue for this sector comes from contributions in kind or transfers by households and other units, payments made by the state or property income.

This sector includes trade unions, professional associations, political parties, churches and other religious societies, cultural, recreational and non-professional sports associations, charitable organizations etc.

2.4.6. Resident and non resident units

An institutional unit is considered resident when its centre of economic interest is located on the territory of the country. Resident units enter transactions with non resident units and these transactions are called foreign transactions. Because of this, the rest of the world is classified as a special unit in the structure of accounting system and has the role of institutional sector.

2.5. Flows and stocks

National accounting rules heavily rely on the distinction between flows and stocks. A flow is related to the actions and effects of events which occur within a given period of time. It has an impact on the changes to the quantity and structure of economic values. On the other hand, a stock refers to the position or state evaluated at a specific point in time. A stock is the balance of assets and liabilities held by an institutional unit at a point in time and is usually recorded at the beginning and by the end of each accounting period.

In national accounting, as well as in usual accounting, flows and stocks are determined as balance items in a balance sheet. A balance sheet may be compiled for institutional units, all productive sectors, the economy as a whole and the rest of the world. The balance sheets of the total economy provide balancing items that are often referred to as national income and wealth respectively.

It is possible to distinguish between two types of economic flows: transactions and other changes in assets. A transaction is an interaction between institutional units by mutual agreement. The SNA93 groups transactions into the following four main groups according to their main purpose:

- transactions in products related to the origin and use of products
- distributive transactions related to the distribution of value added to labour, capital and government and the redistribution of income and wealth
- financial transactions related to the net acquisition of financial assets or the net incurrence of liabilities and
- other transactions, such as the consumption of fixed capital and net acquisitions of non-produced non-financial assets.

The SNA93 also takes into account other changes in assets which are not related to transactions such as:

- other changes in the volume of assets and liabilities
- capital gains and losses.

2.6. The accrual vs. cash principle

According to the SNA93 methodology, national accounts must be compiled on an accrual basis which means that flows must be recorded when the ownership or responsibility over a good or service changes. For example, if a car is purchased in December of the previous year, that transaction must be recorded in the national accounts for that year even in the case where payment is made in January of the following year.

Conversely, compiling accounts on the cash principle means recording only payment and money received when such transactions occur regardless of the actual availability of goods and services for a given institutional unit. The cash principle is adopted in compiling national accounts only in a few limited cases, and for practical reasons (such as in recording some special tax payments).

2.7. The fundamental equations in national accounts

Considering the transaction of goods and services, the fundamental relationship behind national accounts states that the amount of total resources equals the final demand, i.e.:

$$\textit{Total resources} = \textit{GDP} + \textit{imports} =$$
$$= \textit{consumption} + \textit{gross capital formation} + \textit{exports} = \textit{final demand}$$

so that

$$\textit{GDP} = \textit{consumption} + \textit{gross capital formation} + \textit{net exports}$$

Since the GDP is also the sum of the value added generated by each productive sector and institutional unit, it follows that the total income earned by national workers, capital owners and entrepreneurs is such that

$$\textit{Sum of value added} = \textit{GDP} - (\textit{taxes on products} - \textit{subsidies}) =$$
$$= \textit{Sum of income} = \textit{employee compensation} + \textit{profit} + \textit{other income}$$

where taxes and subsidies on products enter the equation as a corrective item due to the special accounting rules adopted for output and input explained above; and "other income" includes the revenue from the self employed and other minor items.

The two fundamental equations above, taken together, imply that the sum of income equals the aggregate demand, i.e.

Aggregate demand = consumption + gross capital formation + net exports =
= GDP = sum of income + (taxes on products – subsidies)

2.8. The three methods of estimating the GDP

The definition of value added (as the difference between output and intermediate consumption) and the two equations discussed in the previous section provide the three main methods of estimating the GDP in practice. In theory, they provide exactly the same results, but differ in the different amount of information required for their implementation in practice.

The first is the so called "production approach", which directly exploits the definition of value added. It requires detailed information about the production and intermediate consumption in each branch of economic activity. In addition, the total amount of taxes on products and subsidies should be known. Then, according to this approach, the GDP is determined as the sum of values added by NACE sectors, i.e.

GDP = Sum of gross value added calculated according to basic prices
+ Taxes less subsidies on products

where taxes and subsidies on products enter the equation due to the special accounting rules explained above.

The second practical estimation method is based on the evaluation of imports and the final uses of available resources. This "expenditure approach" requires detailed information about the different components of aggregate demand. According to this approach, the GDP is estimated as:

GDP = Final consumption (including households final consumption and government consumption)
+ Gross fixed capital formation
+ Changes in inventories
+ External balance (exports minus imports of goods and services)

MONSTAT currently carries out the GDP calculation according to the production and expenditure approach.

The third computation method is the most unfeasible since it relies on the definition of the GDP as the sum of internal income. Accounting based on the distribution of income is called "the revenue approach". It requires reliable data on the different revenue earned by each institutional unit participating in the production process. According to this approach, the GDP is estimated as follows:

GDP = employee compensation
+ profit
+ other income

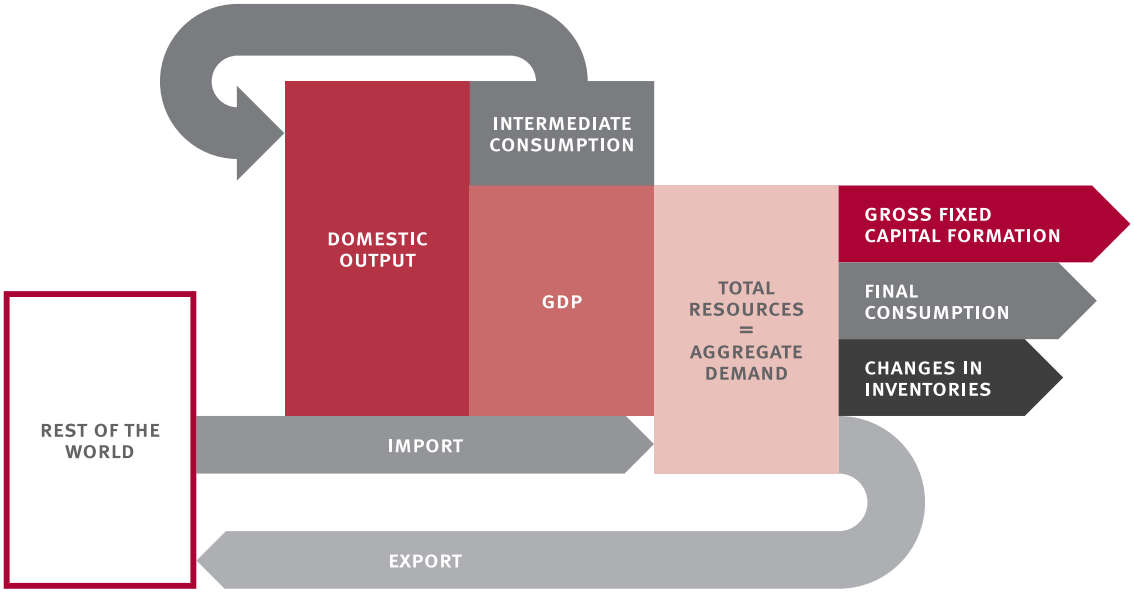
The three methods are summarised in the following chart.

3. The structure of National Accounts

Formally, the results of national accounts are presented through a series of balance sheets, focusing on different aspects of economic activity. The SNA93 defines in detail each item of the balance sheets in such a way that each transaction and economic flow is collocated unequivocally within the system, avoiding any possible duplication or lack of accounting. This property insures that the system of national accounts is internally coherent and consistent.

3.1. The goods and services account and the production account

Taking into account the fundamental equations underlying national accounting, the GDP may be viewed as the centre of a set of flows starting with production and imports and ending with the uses of available resources, as shown in the following flow chart.



The goods and services account is the very first balance sheet in the SNA93 (numbered as account number 0). It simply derives from the fundamental equation of national accounts which states that the resources provided by the GDP and imports may only be used for final consumption, gross fixed capital formation, changes in inventories and exports as shown on the right side of the flow chart above.

The structure of the goods and services account is as follows:

Uses	Resources
P.3 Final consumption expenditure P.31 Individual consumption expenditure P.32 Collective consumption expenditure P.51 Gross fixed capital formation P.52 Changes in inventories P.6 Exports of goods and services	B.1 Gross domestic product P.7 Imports of goods and services
Used resources (= P3 + P51 + P52 +P6)	Disposable resources (= B1 + P7)

The production account is the second account provided in the SNA93. Like any other account, it may be compiled both for the economy as a whole and for each institutional unit or branch of activity. The structure of the production account is presented in the following table:

Uses	Resources
P.2 Intermediate consumption	P.1 Output P.11 Market output P.12 Output for own final use P.13 Other non-market output D.21 Taxes on products and imports D.31 Subsidies on products (-)
B.1 Gross domestic product	

It derives directly from the definition of value added and the GDP. The net domestic product is defined as the difference between the GDP and the consumption of fixed capital in the production process. The production account is illustrated in the left half of the flow chart above.

3.1.1. Taxes on production and imports

In general, taxes are compulsory, unrequited payments, in cash or in kind, made by institutional units to government units. They are described as unrequited because the government provides nothing in return to the individual unit making the payment, although governments use the funds raised by taxes to provide goods or services to all units, either individually or collectively, or to the community as a whole. For instance the government indirectly provides the tax payer with security, justice, education, health services, etc.

Taxes on production and imports consist of:

- taxes on products payable on goods and services when they are produced, delivered, sold, transferred or otherwise disposed of by their producers; they include taxes and duties on imports which become payable when goods enter the economic territory by crossing the border or when services are delivered to resident units by non-resident units.
- other taxes on production, consisting mainly of taxes on the ownership or use of land, buildings or other assets used in production or on the labour employed, or employee compensation.

3.1.2. Subsidies

Subsidies are current unrequited payments which government units, including non-resident government units, make to enterprises on the basis of the levels of their production activity or the quantities or values of the goods or services which they produce, sell, import or export.

Subsidies are not payable to final consumers, and current transfers, which governments make directly to households as consumers, are treated as social benefits. Subsidies also do not include grants which governments may give to enterprises in order to finance their capital formation, or compensate them for damage to their capital assets, such grants being treated as capital transfers.

3.1.3. The role of financial services

In practice, it is quite difficult to establish the cost of financial intermediation among the intermediate consumption of each branch of economic activity. In fact, banks and other financial institutions do not invoice most of their services directly to the customer, but simply reduce the interest paid to them and increase the interest paid by them in an amount corresponding to the value added of banking services. These services include the monitoring of creditworthiness, financial advice, the timely reconciliation of repayments and the recording of these repayments for accounting purposes. The cost of these services is an inseparable part of the interests which the bank charges to its borrowers. Thus, in many cases it is only possible to estimate the total amount of such services for the economy as a whole, but not for each single branch. This summary item, called FISIM (financial intermediation

services indirectly measured) should be subtracted from the sum of sectoral values added in order to correctly estimate the GDP. Otherwise, most of the output of financial institutions would be evaluated twice (once as output and once as missing intermediate consumption).

3.2. Primary distribution and allocation of income accounts

Primary income originates from the direct participation of a subject in the production process and also as a result of property ownership. The main purpose of compiling the primary distribution of income account is to show how primary income is distributed between institutional units and sectors.

The primary distribution of income account consists of two parts:

- The generation of primary income account and
- The allocation of primary income account

For the economy as a whole, the first shows how the productive factors participating directly in the production process are remunerated by means of wages, salaries, operating surplus and mixed income. The second determines the national income as the GDP plus the balance of net primary income coming from abroad.

It is also possible to divide the allocation of primary income account into two sub accounts:

- The generation of entrepreneurial income (summing up all the types of revenue which make up the total remuneration of entrepreneurs, such as mixed income, operative surplus, etc.) and
- The allocation of other primary income account.

The main types of income involved in the primary distribution are

- Employee compensation (i.e. wages and salaries, gross social contributions and income tax)
- Taxes less subsidies on production
- Operating surplus
- Mixed income
- Property income (including interests, dividends and other income which are the result of financial property ownership, rental from property or land, buildings etc.)

For the economy as a whole, the account of primary income distribution has the following structure, where the items on the left hand side of the balance sheet record the revenue of the domestic institutional units and the right hand side records the sum given to other units. In the case of the economy as a whole, the only "other unit" is the rest of word".

Uses	Resources
D.1 Employee compensation D.11 Wages and salaries D.12 Employers' social contributions D.2 Taxes on products and imports D.3 Subsidies (-)	B.1 GDP
B.2 Gross operating surplus	
B.3 Gross mixed income	

The allocation of primary income account includes the following items:

Uses	Resources
D.4 Property income	B.2 Gross operating surplus B.3 Gross mixed income D.1 Employee compensation D.2 Taxes on products and imports D.3 Subsidies (-) D.4 Property income
B.5 Gross national income	

3.2.1. Employee compensation

Employee compensation is defined as the total remuneration, in cash or in kind, payable by an enterprise to an employee in return for work carried out during the accounting period.

Employee compensation is recorded on an accrual basis, i.e. it is measured according to the value of the remuneration which an employee is entitled to receive from an employer for work carried out during the relevant period, whether paid in advance, simultaneously or in arrears in respect to the working performance. Employee compensation does not include any tax payable by the employer on the wage and salary bill (for example, a payroll tax). It is also gross of any compulsory social contributions and income tax to be paid by the employee. Thus the compensation is larger than the actual sum available for private expenditure or saving.

3.2.2. Property income

Property income may be defined as the revenue receivable by the owner of a financial asset or a tangible non-produced asset in return for providing funds to, or putting the tangible non-produced asset at the disposal of, another institutional unit.

Property income includes:

- Interest
- Distributed income from corporations
  - Dividends
  - Withdrawals from income of quasi-corporations
- Reinvested earnings on direct foreign investments
- Property income attributed to insurance policy holders
- Rents

A special kind of rent, named "imputed" rent, is that which corresponds to the housing services provided to the owner occupying his own dwelling. Although it does not correspond to any monetary transaction, it represents an important component of household consumption.

3.2.3. Mixed income and operating surplus

Mixed income is revenue where it is impossible to distinguish between the remuneration of the entrepreneur as a simple worker, as the organiser of the production process and the owner of capital. It is typical for small businesses and the self-employed.

The operating surplus is the balancing item of the generation of income account, which is the difference between the GDP and other income. From an economic point of view, it represents gross pre-tax profit not included in mixed income and property income. In practice, it is very difficult to distinguish between mixed income and operating surplus, thus sometimes the former is simply included in the item named "operating surplus".

3.2.4. Gross national income and net national income

Gross national income (GNI) is the sum of the balances from primary income from all institutional units and sectors in the economy. For the economy as a whole, it corresponds to the GDP plus the net primary income from abroad. The net national income (NNI) equals the GNI less the consumption of fixed capital.

3.3. The account of secondary distribution of income

The account of the secondary distribution of income analyses the second stage in the process of income distribution i.e. the provision of revenue not directly related to the participation in the current productive process, such as pensions and allowances for inactive persons, and the collection of taxes on income and wealth and social contributions.

A particular group of distributive items relates to benefits and transfers in kind, i.e. goods and services provided to the beneficiary without any counterpart in terms of working performance or use of assets. According to the SNA93, households are the only institutional units which may be the recipient of transfers in kind.

Current transfers represent transactions in which one institutional unit provides another institutional unit with goods and services without compensation in money or kind. They differ from capital transfers which are transactions on the transfer of property rights and obligations between institutional units.

Current transfers consist of:

- Current transfers of income or wealth
- Social contributions and benefits
- Other current transfers

For the economy as a whole, the account of secondary distribution of income has the following structure, where the items on the left hand side of the balance sheet record the revenue of the institutional unit, while the right hand side records the amount given to other units. In the case of the economy as a whole, the only "other unit" is the rest of word".

Uses	Resources
D.5 Current taxes on income, wealth, etc. D.6 Social contributions and benefits D.7 Other current transfers	B.5 Gross national income D.5 Current taxes on income, wealth, etc. D.6 Social contributions and benefits D.7 Other current transferse
B.6 Gross disposable income	

The balancing item, i.e. the gross disposable income, is the amount of resources which may be used by the residents for final uses.

3.3.1. Current taxes on income, wealth, etc.

Current taxes on income, wealth, etc. are defined as compulsory, unreturned payments, in cash or in kind, payable by institutional units to government units. They consist mainly of taxes levied on the income of households and corporations. As such they differ from tax on production. Taxes on income include those levied on

- individual or household income
- income or corporation profits
- capital gains
- winnings form the lottery or gambling

On the other hand, current taxes on wealth consist of taxes which are payable periodically, usually once a year, on the property or net wealth of institutional units, excluding taxes on land, buildings, or other assets owned or rented by enterprises and used by them for production, such taxes being treated as other taxes on production.

3.3.2. Social contributions

Social contributions are actual or imputed payments to social insurance schemes aimed at making a provision to pay social insurance benefits. They may be made by employers on behalf of their employees or self-employed or unemployed persons on their own behalf.

Employers' actual social contributions are paid by employers to social security funds, insurance enterprises or autonomous as well as non autonomous pension funds which manage social insurance schemes in order to secure social benefits for their employees. Their value is recorded as one of the components of employee compensation together with wages and salaries in cash and in kind.

Employees' social contributions are paid by employees to social security funds and privately funded social insurance schemes. They consist of the actual contributions payable each period plus, in the case of privately funded schemes, the contribution supplements payable from the property income attributed to insurance policy holders received by those employees participating in the schemes less service charges.

Social contributions made by self-employed and unemployed persons are social contributions payable for their own benefit by persons who are not employees, namely, self-employed persons (employers or workers on their own account), or unemployed persons (to make a provision for their future pension).

3.3.3. Social benefits

Social benefits are current transfers received by households intended to provide for the needs arising from certain events or circumstances: for example, sickness, unemployment, retirement, housing, education or family circumstances.

Social benefits include
- Social insurance benefits
- Social assistance benefits

Social benefits may be paid in kind (such as free housing services, etc.) and in cash.

3.3.4. Current transfers

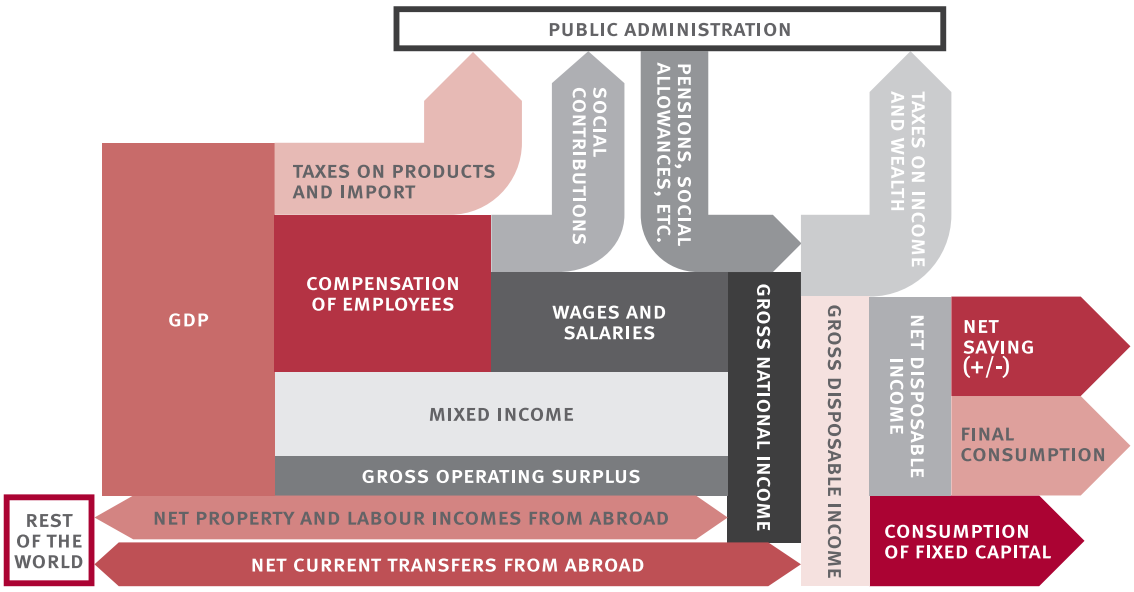
A transfer is defined as a transaction in which one institutional unit provides goods, services or assets to another unit without receipt or expectation of any return as counterpart from the latter. A cash transfer consists of the payment of currency or transferable deposit by one unit to another. A transfer in kind consists either of the transfer of ownership of a good or asset, other than cash, or the provision of a service, again without any counterpart.

Social transfers in kind payable by government units and non-profit making organisations are recorded on the left side of the account of secondary distribution of income while the right side of the account registers transfers received.

The main categories of social transfers in kind are:
- Social security compensation
- Other social payment in kind
- Social assistance in kind
- Transfers of individual non-market goods and services

Overall disposable income, i.e. the balancing item in the redistribution of income account, includes the net flow of benefit in kind received by each unit.

The following chart shows the logical path from the GDP to the net disposable income and its final uses:



3.4. The estimation of the GDP at constant prices

The GDP evaluated in monetary terms (euros, dollars, etc.) may change over time both because the quantity of goods and services produced changes, and because their unit prices vary. Although pure price changes do not affect the well-being of residents, price changes reduce the value of the monetary assets held by residents.

Therefore, in order to estimate the real result of economic activity it is necessary to estimate the GDP "as though" prices do not change over time. The set of (complex) operations necessary to estimate the GDP and the other items of national accounts at constant prices is called "deflation". The results of deflation are sometimes also called "volume indexes". Deflated GDP measures quantity changes during the observed period of time and excludes the impact of price dynamics. For instance, if we assume that production has not changed this year in comparison with the previous year, but its nominal value has increased, deflated production will not change. In other words, an increase in nominal production does not mean that it has grown in physical terms, contrary to what an incorrect interpretation of data would conclude.

It is worth noting that, regardless of the estimation method and the choice of base period, the fundamental relations between the rate of changes of the nominal and real GDP hold, by definition, i.e.

(1+growth rate of GDP at current prices/100)=
(1+growth rate of GDP in volume/100) x
x (1+growth rate of GDP deflator/100)

3.4.1. Methods for the deflation of value added and the GDP

There are many ways to estimate the GDP and the other items of national accounts at constant prices. All of them take into account the prices set in a reference point in time, known as "the base period", possibly changing over time.

The practice of changing the base period depends on the speed of changes in terms of trade among the different products and the frequency of the introduction of new products onto the market or the exit of old ones.

If the base period were not to change frequently enough, the "constant" price would be scarcely representative of the actual economic development. The SNA93 recommends that the base year for estimating the GDP at constant prices be changed every fifth year at least. However, even if it is possible to calculate the volume indexes using the same base year for several years, the SNA93 also suggests calculating the chain volume indexes, i.e. to use the prices of the previous year to estimate the aggregate at constant prices for the following year. The main advantage of this chain-linking practice is that the structure of the terms of trade among the various goods and services is more similar in each couple of years compared in order to estimate the annual growth rates at constant prices.

The methods used to estimate the GDP at constant prices may be grouped into two broad categories:

- deflation and
- extrapolation.

Generally speaking, the best method to estimate the volume of the flow of goods and services is to deflate the corresponding value by the appropriate price indexes. In practice, however, that is not always the best solution for many reasons, the main one being that the available price indexes are not detailed enough.

We can distinguish between the two main methods of deflation for value added and the GDP:

- the double deflating method and
- the simple deflating method.

In theory, the first is the most appropriate. In fact, it exploits the fact that value added and the GDP are defined as the difference between output and input. Thus, the method of double deflation applies appropriate price indexes to deflate output and intermediate consumption separately. The final deflated value added is then the difference between the deflated output and input.

For instance, according to this method, the value of production (output) in mining and manufacturing is deflated by the indexes of the producer prices of industrial products; agricultural activity by the indexes of the producer prices of agricultural products, transport by the price indexes in transport, etc. The corresponding intermediate consumption is deflated by the price indexes of products and materials actually used in the production process as intermediate consumption (e.g. seeds, fertilizers, fuel for agricultural machinery, etc.) in agriculture.

This method is recommended because it

- is perfectly consistent with the theoretical definition of value added
- takes into account possible changes in technology (i.e. in the structure of inputs)
- takes into account possible changes in productivity (i.e. in the ratio between output and input)
- takes into account possible changes in quality, i.e. it includes new products and excludes replacement products which no longer exist on the market.

Unfortunately, the detailed information required for double deflation (such as the amount of each input actually used and the related prices) is often unavailable in due time. In addition, the practical application of double deflation sometimes provides very volatile results (mainly because of the assumptions about the constant structure of inputs). Thus, an alternative to the double deflating method is the simple deflation method which applies the appropriate price indexes of output or input to the current value added directly measured. The assumption for using this method is that the prices of intermediate consumption change at the same rate as those of output.

In cases where reliable price indexes for either output or input are also unavailable, the value added and the GDP at constant price is estimated using quantity indicators. Here we can distinguish between the two methods of "extrapolation", in the same way as for deflation:

- the double extrapolation method and
- the simple extrapolation method.

When using the double extrapolation method, the output and input at constant prices are estimated by updating their current value in the base period by appropriate quantity indexes (such as the index of industrial production in the case of output in manufacturing). In this case, the value added at constant prices is the difference between the extrapolated value of output and the extrapolated value of intermediate consumption. The simple extrapolation method directly extrapolates value added at current prices by quantity indexes.

3.4.2. The estimation of the GDP at constant prices in Montenegro

In theory every item of the production account and of the goods and services account could be estimated at constant prices, also providing an estimation of the GDP in volume. For the time being MONSTAT, like many other official statistical agencies, calculates the GDP at constant prices from the production side only.

Before the recent revision, the first preliminary estimates of the GDP at constant prices for the years 2000-2003 had

used 2000 as the base year, while the first preliminary estimate of the GDP at constant prices for 2004 and 2005 had been calculated according to the chain indexes method.

During the revision of GDP figures for the period 2000-2005 MONSTAT calculated GDP at constant prices by using chain indexes and applying the simple extrapolation method as the best solution according to currently available resources.

The table below shows the indicators used for the estimation of the gross value added at constant prices by sector:

Sectors/ Sub-sectors	Activities	Indicators
A	Agriculture, hunting and forestry	Volume index of agricultural production, catching fish and cutting trees
AA	Agriculture	Volume index of agricultural production
AB	Forestry	Volume index of cutting trees
B	Fishing	Volume index of catching fish
C	Mining and quarrying	Volume index of extracted ores and stones
CA	Extraction of energy producing materials	Volume index of extracted energy producing materials
CB	Extraction of other producing materials, except energy	Volume index of other extracted producing materials
D	Manufacturing	Volume index of manufacturing
DA	Manufacture of food products, beverages and tobacco	Volume index of manufacturing food products, beverages and tobacco
DB	Manufacture of textiles and textile products	Volume index of textiles and textile products
DC	Manufacture of leather and leather products	Volume index of manufacturing leather and leather products
DD	Manufacture of wood and wood products	Volume index of manufacturing wood and wood products
DE	Manufacture of cellulose, paper and paper products, publishing activity and printing	Volume index of manufacturing cellulose, paper and paper products
DF	Manufacture of coke, derivative oils and nuclear fuel	Volume index of manufacturing coke, derivative oils and nuclear fuel
DG	Manufacture of chemical products and fibre	Volume index of manufacturing chemical products and fibres
DH	Manufacture of rubber and plastic products	Volume index of manufacturing rubber and plastic products
DI	Manufacture of other non-metal minerals	Volume index of manufacturing other non-metal minerals
DJ	Manufacture of basic metals and standard metal products	Volume index of manufacturing basic metals and standard metal products
DK	Manufacture of machinery and other equipment	Volume index of manufacturing machinery and other equipment
DL	Manufacture of electric and optical appliances	Volume index of manufacturing electric and optical appliances
DM	Manufacture of transport equipment	Volume index of manufacturing transport equipment
DN	Manufacturing n.e.c.	Volume index of manufacturing n.e.c.
E	Production and distribution of electricity and water supply	Volume index of manufacturing electricity and water supply
F	Construction	Index of effective working hours
G	Wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods	Index of real retail trade turnover and index of number of employees
H	Hotels and restaurants	Index of tourist overnight stays
I	Transport, storage and communication	
IA	Road transport	Index of tons of goods and number of passengers transported
IB	Maritime transport	Index of tons of goods and number of passengers transported
IC	Air transport	Index of tons of goods and number of passengers transported
ID	Auxiliary activity in transport, activity of travel agencies	Index of tons transported
IE	Postal activity and telecommunications	
	Postal activity	Index of letters sent
	Fixed telecommunications	Index of fixed telephony impulses
	Mobile telecommunications	Index of mobile telephony minutes
J	Financial intermediation	Index of number of employees
K	Real estate, renting and business activities	
	Real estate and other business activities	Index of number of employees
	Dwelling services	Index of newly-built dwellings
L	Public administration and defence, compulsory social security	Index of number of employees
M	Education	Index of number of employees
N	Health and social work	Index of number of employees
O	Other community, social and personal activities	Index of number of employees
P	Private households with employed persons	Index of number of employees
1. Total excl. FISIM		
2. FISIM		Index of number of employees in financial sector
3 = (1 – 2), GDP at basic prices		
4. Customs		Group index of real growth in import sector
5. Taxes		Index of real taxes value
6. Subsidies		Index of real subsidies value
7 = (3+4+5-6), GDP at market prices		

3.5. Revisions in national accounts

Revision in national accounts is a normal process when statistical agencies have better information about the economic situation. Generally, revisions follow the introduction of new surveys and the use of other new data sources, the improvement of the existing ones and the introduction of new or improved estimation methods (for example, the OECD recommendation about non observed economy calculation) and new internationally adopted rules, definitions and classifications.

Usually, not only are current data revised, but also past data, in order to improve the overall quality of the time series and to insure the comparability of data over time. This retrospective revision may arouse criticism and confusion among the users. However, this is the only way to produce timely estimations, even if they are based on incomplete information and the timeliness entails later revisions. Thus, revisions should not be considered a drawback of the system, but rather one of its strongest points, since only revisions insure that the accuracy of national accounts improves alongside access to upgraded information.

At present, MONSTAT is relatively new on the way towards the implementation of the ESA95. In 2003 it published its first GDP figures for 2000 and 2001, still based on the social product methodology. Only later on, GDP data for the period 2002 - 2005 were calculated and published, the latter integrating much more ESA95 concepts. The following are of significance in the revision of GDP data during the last period:

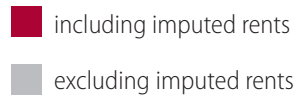
- changes to the Montenegrin accounting system (the harmonization of financial statements with international standards),
- essential changes to the data collection method,
- improved quality of processed statistical surveys,
- better coverage of non-observed economy
- imputed rent now estimated by user-cost approach
- more extensive experience in the compilation of the GDP at constant prices

The most important improvement in the statistical information system is as a result of the implementation of the Household Budget Survey (HBS) according to the Classification of Individual Consumption by Purpose (COICOP). This survey was introduced in February 2005 with the assistance of Swedish experts. Through the HBS, MONSTAT can now collect data pertaining to individual consumption expenditure directly from households which provide information about their monthly disbursements. In the previous years the value of individual household consumption was mainly estimated according to a regular statistical survey carried out on a quarterly basis which was not harmonized with EU standards.

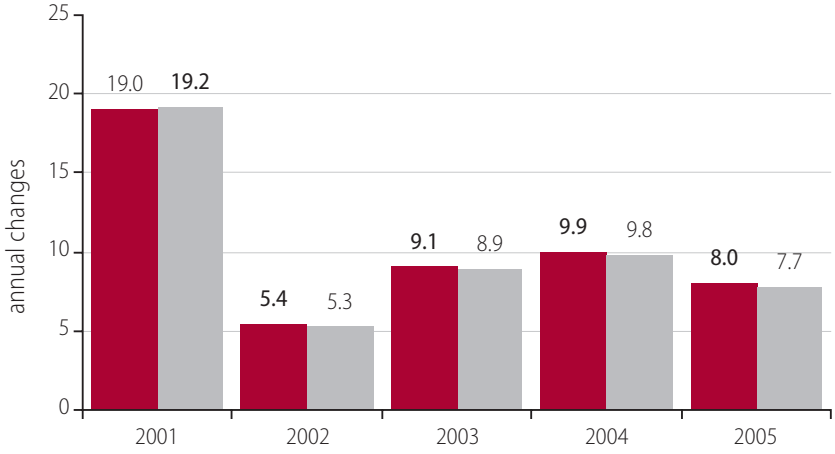
The other reason for revision, which is no less important, focussed on the estimation of non observed economy components. It is well known that the non-observed economy is mostly concentrated in agriculture, trade, transport, construction, real estate and hotel and restaurants. A pilot OECD supported project provided a detailed analysis of economic activity in agriculture and tourism, allowing also to improve the estimation of non observed economy in these two branches.

Another important change to national accounts is the estimation of the value added of owner-occupied dwellings. During 2007, MONSTAT introduced the user-cost approach to estimate the imputed rent of owner-occupied dwellings, which is an important item of the total household consumption and of value added as well. The introduction of imputed rent resulted in one of the largest revisions in the GDP level, but not in its dynamics over time, as shown in the following graph.

DYNAMICS OF NOMINAL GDP
(annual percentage changes)



Source: MONSTAT – National Accounts



Finally, the GDP was recently revised because of the adoption of the chain approach in estimating data at constant prices by using the single indicators method.

3.5.1. The main effects of revision on the estimated GDP

The latest revision of national accounts entailed an average re-evaluation of the GDP at current prices of 3.8% during the period 2000 – 2005. The largest changes occurred in 2003 (8.5%), while only a minimal re-evaluation occurred in the last two years.

GDP AT CURRENT PRICES (IN EURO THOUSANDS)

Year	Preliminary data	Revised data	Difference in %
2000	1022200	1065698	4.3
2001	1244788	1295109	4.0
2002	1301505	1360353	4.5
2003	1392009	1510128	8.5
2004	1651164	1669783	1.1
2005	1785301	1814994	1.7
average 2000-2005	1399495	1452678	3.8

As far as the estimation of the real growth rate is concerned, the revision was only significant in 2001, when the estimated growth grew from -0.2% to 1.1%. In the following years, the revision only marginally affected the dynamics of the real GDP.

GDP GROWTH RATES (AT CONSTANT PRICES), IN %

Year	Preliminary data	Revised data	Difference
2001	-0.2	1.1	1.3
2002	1.7	1.9	0.2
2003	2.4	2.5	0.1
2004	4.2	4.4	0.2
2005	4.0	4.2	0.2
average 2000-2005	2.4	2.8	0.4

3.5.2. A comparison between the Social Product and the GDP in Montenegro

Although the Social Product (SP) and the GDP reflect very different concepts of production and income, they aim at measuring the same economic variable, i.e. the amount of resources which may be used by the national community every year. Since the SP did not include most services, and services are mainly produced for final uses, it is expectedly lower than the corresponding GDP. In fact, the following table, which compares the SP and the GDP for Montenegro, confirms this intuition since according to the average for the period 2000 – 2003, the GDP was more that 40% greater than the SP, rising to a maximum of about 70% in 2000.

DIFFERENCE BETWEEN SOCIAL PRODUCT AND GDP AT CURRENT PRICES

Year	Social product	GDP	Difference in %
2000	634357	1065698	68.0
2001	910255	1295109	42.3
2002	1009481	1360353	34.8
2003	1154575	1510128	30.8
average 2000-2003	927167	1307822	41.1

Nevertheless, the dynamics of the SP and the GDP in Montenegro is more similar than expected, with the only exception being 2001, when the difference between the annual changes to the two aggregates picks up to 22 percentage points. In any case, both the SP and the GDP show a deceleration in 2002 and an acceleration in 2003.

THE DYNAMICS OF SOCIAL PRODUCT AND GDP
(percentage changes on the previous year)

Year	Social product	GDP	Difference
2001	43.5	21.5	-22.0
2002	10.9	5.0	-5.9
2003	14.4	11.0	-3.4
average 2000-2003	22.1	12.3	-9.8

4. The national accounts and recent evolution of Montenegrin economy

The system of national accounts provides economists and the general public with the opportunity to measure the progress of the Montenegrin economy more accurately. In particular, the estimates provided by the national office of statistics confirm the evolution of the country toward a modern market economy, in which the role of agriculture is declining, and services fuel the growth. At the same time, the estimates confirm the driving force of consumption and exports.

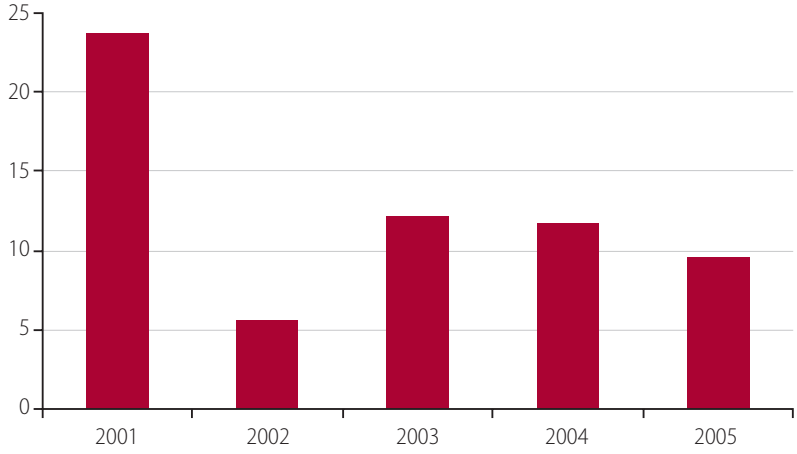
4.1. The structure and evolution of the productive sectors

The picture of the Montenegrin economy may be very different depending on whether the analysis is based on data at current prices, embodying the increase of prices, or on data at constant prices, reflecting the real flow of goods and services produced within the country.

4.1.1 The main results of the estimates at current prices

On average, the annual GDP nominal growth rate in the period between 2000 and 2005 amounted to 11.4% (11.1% excluding imputed rents). The rate of change of the nominal GDP marked a minimum in 2002 (5%) and picked up to a maximum of 21.5% in 2001. In the last three years, the pace of growth of the nominal GDP has stabilised at about 9-10% per year.

GDP GROWTH RATE AT CURRENT PRICES
(percentage changes on the previous year)



Of course, the evolution of the nominal GDP reflected both the dynamics of productive activity, and the increase of prices.

CONTRIBUTION TO THE NOMINAL GROWTH OF VALUE ADDED
(percentage points)

	2001	2002	2003	2004	2005	Average 2000-2005
Agriculture, hunting and forestry	2.02	0.72	0.07	0.38	0.30	0.70
Fishing	0.00	0.01	0.02	0.00	0.00	0.01
Agriculture, hunting, forestry and fishing	2.02	0.73	0.09	0.38	0.30	0.70
Mining and quarrying	-0.34	0.45	-0.11	-0.20	0.01	-0.04
Manufacturing	5.25	-0.70	-0.76	1.05	0.20	1.01
Electricity, gas and water supply	1.12	0.32	1.20	0.60	-0.67	0.51
Industry	6.03	0.07	0.33	1.44	-0.46	1.48
Construction	0.42	0.34	-0.49	0.48	0.31	0.21
Wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods	1.10	1.13	0.42	0.39	1.40	0.89
Hotels and restaurants	0.20	0.28	0.29	1.08	0.31	0.43
Transport, storage and communications	5.75	-0.91	0.08	1.26	0.58	1.35
Financial intermediation	-0.43	0.23	0.15	0.36	0.34	0.13
Real estate, renting and business activities	3.05	0.81	1.71	1.86	0.22	1.53
Public administration and defence, compulsory social security	0.47	0.98	1.14	1.09	2.50	1.24
Education	0.47	0.40	0.46	0.77	0.38	0.50
Health and social work	1.03	0.05	1.00	0.60	0.80	0.70
Other community, social and personal activities	1.06	-0.04	0.61	0.38	0.27	0.46
Private households with employed persons	0.00	0.00	0.00	0.00	0.00	0.00
Services	12.71	2.94	5.85	7.80	6.80	7.22
Gross value added (at basic prices) (*)	19.25	3.70	5.20	8.65	5.93	8.55
Financial intermediation services indirectly measured (FISIM) (*)	0.02	0.06	-0.04	-0.05	0.03	-0.004
Taxes on products less subsidies on products (*)	2.31	1.41	5.77	1.87	2.80	2.83

Note: *The contribution of the value added of the j-th sector in the period (t-1, t) (i.e.: $VA_{t,j}$) to the total VA growth (GVA) is evaluated as $100x(VA_{t,j} - VA_{t-1,j})/GVA_{t-1}$, or, equivalently, as the percentage change of $VA_{t,j}$ weighted by the ratio $VA_{t-1,j}/GVA_{t-1}$.*

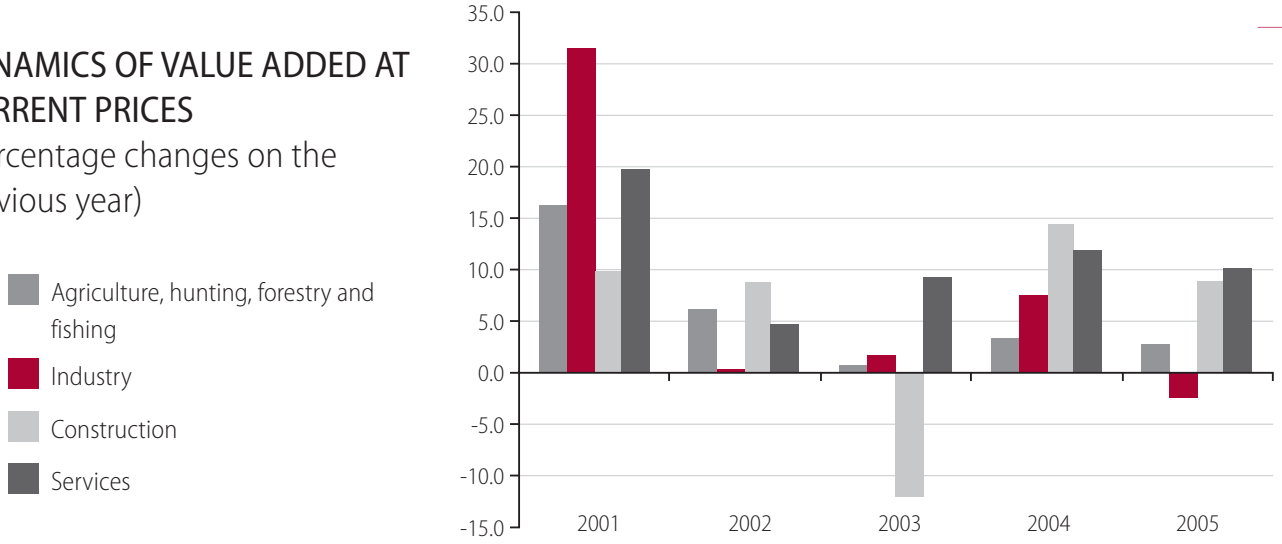
(*) Contribution to the GDP growth.

On average, during the period 2000 – 2005, the largest contribution to the growth of the nominal gross value added was made by services (7.22 percentage points per year). Transport, storage and communications contributed with 1.35 points, real estate, renting and business activities contributed with 1.53 points (1.19 excluding imputed rents), and public administration, defence, and compulsory social security with 1.24 points.

Services contributed to the nominal growth with 12.71 points in 2001 and 6-8 points between 2003 and 2005.

A contribution of 1.01 points was made by manufacturing (1.48 points for the industrial sector, including manufacturing, energy and mining), with a maximum of 5.25 points in 2001, and a negative contribution in 2002 and 2003. The average contribution made by construction was 0.21 percentage points: it was almost stable at about 0.4 points per year, apart from a negative contribution of 0.5 points in 2003. Finally, the average contribution from agriculture, hunting, forestry and fishing to the nominal value added growth between 2000 and 2005 was 0.71 percentage points per year. As expected, it was one of the most variable value, depending mainly on weather conditions and the fluctuations of international prices. It picked up to 2.02 in 2001 and fell to a minimum of 0.09 in 2003.

DYNAMICS OF VALUE ADDED AT CURRENT PRICES
(percentage changes on the previous year)



As a consequence of the different dynamics of the various branches of economic activity, their impact on the overall value added also changed over time. The share of agriculture fell from 12.4% in 2000 to 10.4% in 2005; that of manufacturing picked up to a maximum of 11.6% in 2001 and later fell to 8.2% in 2005; services increased their impact on the value added as a consequence of the modernization of the Montenegrin economy, from 63-64% between 2000 and 2002 to a maximum of 69% in 2005, with an acceleration in the very last few years.

The sectors which recorded the largest relative gains within the structure of the Montenegrin nominal value added were: hotels and restaurants; health and social work and other community, social and personal activities. The largest reductions of impact occurred in mining and quarrying, financial intermediation, and real estate, renting and business activities excluding imputed rents.

THE STRUCTURE OF GROSS VALUE ADDED
(percentage of sectoral value added at current prices)

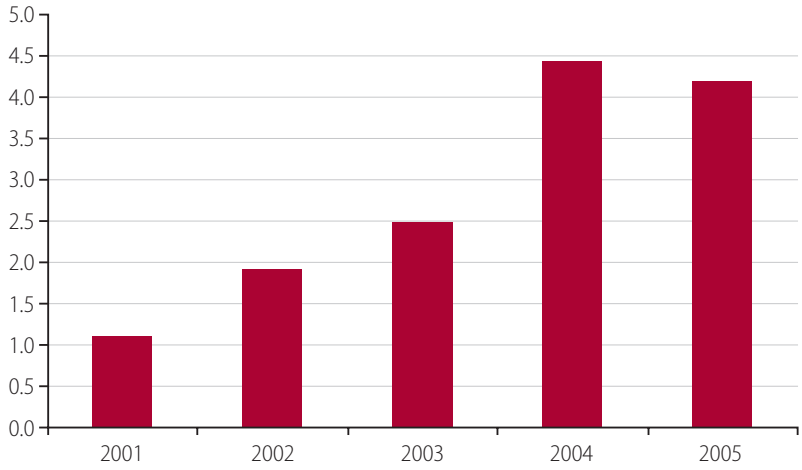
	2000	2001	2002	2003	2004	2005
Agriculture, hunting and forestry	12.4	11.9	12.1	11.5	10.8	10.4
Fishing	0.0	0.0	0.0	0.0	0.0	0.0
Agriculture, hunting, forestry and fishing	12.4	11.9	12.2	11.6	10.9	10.4
Mining and quarrying	2.9	2.1	2.5	2.2	1.8	1.7
Manufacturing	10.2	12.8	11.6	10.2	10.2	9.8
Electricity, gas and water supply	6.0	5.9	6.0	6.8	6.7	5.6
Industry	19.1	20.7	20.0	19.2	18.8	17.1
Construction	4.3	3.9	4.0	3.4	3.5	3.6
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	14.1	12.5	13.1	12.8	12.0	12.5
Hotels and restaurants	2.7	2.4	2.6	2.7	3.5	3.5
Transport, storage and communications	10.4	13.3	11.9	11.4	11.5	11.3
Financial intermediation	3.5	2.5	2.7	2.7	2.7	2.9
Real estate, renting and business activities	12.8	13.1	13.3	14.2	14.6	13.9
Public administration and defence; compulsory social security	9.0	7.8	8.4	9.0	9.2	10.9
Education	4.8	4.4	4.6	4.8	5.0	5.1
Health and social work	4.1	4.3	4.2	4.9	5.0	5.4
Other community, social and personal activities	2.8	3.1	3.0	3.4	3.4	3.5
Private households with employed persons	0.0	0.0	0.0	0.0	0.0	0.0
Services	64.2	63.4	63.8	65.8	66.9	68.9
Gross value added (at basic prices) (*)	90.9	90.6	89.8	85.6	85.2	83.8
Financial intermediation services indirectly measured (FISIM) (*)	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1
Taxes on products less subsidies on products (*)	9.3	9.5	10.4	14.6	14.9	16.3
GROSS DOMESTIC PRODUCT	100.0	100.0	100.0	100.0	100.0	100.0

(*) Ratio to GDP

4.1.2. The main results of the estimates at constant prices

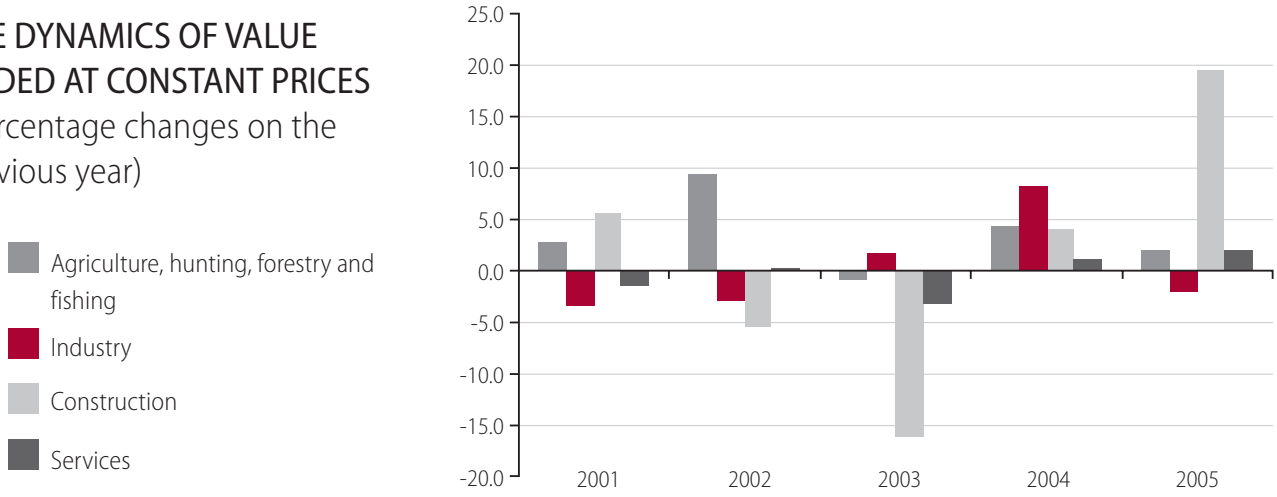
The general rate of inflation, as measured by the retail trade index, fell from 23% in 2001 to 3.4% in 2005. Thus, only an analysis of the aggregates evaluated at constant prices may show the real progress in the Montenegrin economy.

GDP GROWTH RATE AT CONSTANT PRICES
(percentage changes on the previous year)



The annual average growth rate of the GDP between 2001 and 2005 was 2.8%, with a minimum in 2001 (1.1%) and a maximum in 2004 (4.4%). This positive growth can be mainly attributed to a significant increase in agricultural and industrial production and not to price changes in this period. In 2005 a significant growth rate of 4.2% was also recorded, thanks to a boom in construction.

THE DYNAMICS OF VALUE ADDED AT CONSTANT PRICES
(percentage changes on the previous year)



On average, during the period 2000 – 2005, the largest contribution to the growth came from agriculture (about 0.4 percentage points per year), trade (0.7) and hotels (0.2), while manufacturing played only a minor role in the growth process, and real estate, renting and business activities (including imputed rents) slowed down the overall production (with a negative contribution to the growth of GVA by 1 percentage point). Finally, the dynamics of the GDP were speeded up by net tax on production (which contributed, on average, 2.6 percentage points to the GDP growth), mainly reflecting the role of taxes on fast growing imports, the introduction of VAT in 2003, and the reduction of subsidies to firms (which is typical during transition toward a market economy).

In turn, the contribution of agriculture was very large in 2002 (1.1 percentage points, which is about the same as the overall GDP real growth in that year), while it reduced the growth in 2003 by 0.1 percentage points. The contribution of manufacturing was negative or negligible until 2003, and became significantly positive after 2004 (about 0.6 points per year) as the restructuring of the Montenegrin economic system progressed. Surprisingly, services had a fluctuating influence on GDP growth: their contribution was positive in 2002, 2004 and 2005 (when it picked up to a maximum of 1.2 percentage points). However, the same branch of activity slowed down the GDP

in 2001 by about 1 percentage point and in 2003 by 2 points. The two reductions corresponded to a fall in the value added produced by real estate, renting and business activities, mainly due to imputed rents.

THE CONTRIBUTION TO THE REAL GROWTH OF VALUE ADDED
(in percentage points)

	2001	2002	2003	2004	2005	Average 2000-2005
Agriculture, hunting and forestry	0.32	1.05	-0.11	0.46	0.20	0.38
Fishing	0.00	0.00	0.00	0.01	0.00	0.00
Agriculture, hunting, forestry and fishing	0.32	1.05	-0.11	0.48	0.20	0.39
Mining and quarrying	-0.38	0.37	0.02	-0.11	-0.03	-0.03
Manufacturing	0.12	-0.57	-0.74	0.57	0.56	-0.01
Electricity, gas and water supply	-0.37	-0.39	1.04	1.02	-0.90	0.08
Industry	-0.63	-0.58	0.32	1.48	-0.37	0.04
Construction	0.23	-0.20	-0.62	0.12	0.64	0.03
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	0.46	1.01	0.39	-0.13	1.69	0.69
Hotels and restaurants	0.50	-0.19	0.20	0.14	0.50	0.23
Transport, storage and communications	1.03	-0.45	-0.08	-0.34	0.01	0.03
Financial intermediation	-0.20	0.03	-0.42	0.23	-0.25	-0.12
Real estate, renting and business activities	-2.81	0.32	-2.46	0.21	-0.21	-0.99
Public administration and defence; compulsory social security	0.03	-0.02	0.26	-0.10	0.18	0.07
Education	0.01	0.19	-0.14	0.03	-0.05	0.01
Health and social work	0.02	-0.58	0.06	0.15	-0.17	-0.11
Other community, social and personal activities	0.01	-0.18	0.16	0.51	-0.53	-0.01
Private households with employed persons	0.00	0.00	0.00	0.00	0.00	0.00
Services	-0.95	0.12	-2.01	0.70	1.17	-0.19
Gross value added (at basic prices) (*)	-0.94	0.35	-2.18	2.38	1.39	0.20
Financial intermediation services indirectly measured (FISIM) (*)	0.00	0.00	0.03	-0.03	0.01	0.00
Taxes on products less subsidies on products (*)	2.05	1.56	4.63	2.07	2.78	2.62

(*) Contribution to the GDP growth

As a consequence of the different sectoral dynamics, the impact of agriculture on the real value added fell from 12.4% in 2000 to 11% in 2005, almost in line with its share at current prices. Manufacturing slightly increased its role from 2000 to 2002 (when it picked up to 12.1%), then lost impact during the period 2003 – 2005, rolling back to the impact it had during the first years of the 21st century, even if the reduction was overstated by data at current prices. Finally, services increased their role in the Montenegrin economy, in particular during 2004 and 2005, when their impact on the real GVA picked up to 65-67%. This result further confirms the evolution and modernization of the Montenegrin economy. Nevertheless, the development of services was also associated with a faster increase of prices, since the impact of this sector on the current GVA reached 69% in 2005, starting from 63-64% in 2000 – 2002.

THE STRUCTURE OF REAL GROSS VALUE ADDED
(as percentage of GVA at constant prices)

	2000	2001	2002	2003	2004	2005
Agriculture, hunting and forestry	12.4	12.9	12.9	12.3	11.7	10.9
Fishing	0.0	0.0	0.0	0.0	0.1	0.0
Agriculture, hunting, forestry and fishing	12.4	12.9	12.9	12.4	11.7	10.9
Mining and quarrying	2.9	2.5	2.5	2.5	2.0	1.8
Manufacturing	10.2	10.4	12.1	11.1	10.5	10.6
Electricity, gas and water supply	6.0	5.7	5.5	7.2	7.6	5.7
Industry	19.1	18.7	20.1	20.8	20.1	18.1
Construction	4.3	4.5	3.7	3.5	3.4	4.1
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	14.1	14.7	13.5	13.8	12.3	13.4
Hotels and restaurants	2.7	3.3	2.2	2.9	2.8	3.9
Transport, storage and communications	10.4	11.5	12.8	12.1	10.7	11.3
Financial intermediation	3.5	3.3	2.6	2.3	2.8	2.5
Real estate, renting and business activities	12.8	10.1	13.3	11.2	14.1	14.2
Public administration and defence; compulsory social security	9.0	9.1	7.7	8.9	8.7	9.2
Education	4.8	4.9	4.5	4.5	4.7	4.9
Health and social work	4.1	4.2	3.7	4.3	4.9	4.7
Other community, social and personal activities	2.8	2.8	3.0	3.2	3.8	2.8
Private households with employed persons	0.0	0.0	0.0	0.0	0.0	0.0
Services	64.2	63.9	63.3	63.3	64.7	66.9
Gross value added (at basic prices) (*)	90.9	89.0	89.3	85.5	84.2	83.1
Financial intermediation services indirectly measured (FISIM) (*)	0.2	0.2	0.1	0.2	0.2	0.1
Taxes on products less subsidies on products (*)	9.3	11.2	10.9	14.7	15.9	16.9
GROSS DOMESTIC PRODUCT (market prices)	100.0	100.0	100.0	100.0	100.0	100.0

(*) Ratio to GDP.

4.2. The structure and evolution of demand

During the period 2000-2005, final consumption expenditure was the main component of aggregate demand in Montenegro, on average accounting for 99.6% of the nominal GDP. Within consumption, households absorbed 73.8%, and the expenditure for individual services provided by the governmental sector and collective services accounted for about 25.8% of the GDP. In turn, gross fixed capital formation (i.e. approximate investment) absorbed 19.1% of the GDP and the external component of aggregate demand (i.e. exports) accounted for about 37.8% of the total nominal income produced in Montenegro.

Under such conditions, imports played a fundamental role in satisfying the aggregate demand, so that on average they reached 56.5% of the GDP. As a consequence, the external deficit of Montenegro picked up to 18.7% of the GDP.

THE STRUCTURE OF AGGREGATE DEMAND
(as percentage of GDP at current prices)

	2000	2001	2002	2003	2004	2005	Average 2000-2005
Households final consumption expenditure	70.0	75.0	80.9	74.2	73.1	69.9	73.8
Government final consumption expenditure	21.9	25.2	24.9	26.8	26.3	29.9	25.8
Final consumption expenditure	91.9	100.2	105.7	101.0	99.4	99.8	99.6
Gross fixed capital formation	16.9	17.5	14.6	13.3	17.1	18.0	16.2
Changes in inventories	5.5	5.9	4.1	2.1	-0.4	-0.3	2.8
Gross capital formation	22.4	23.4	18.8	15.4	16.6	17.7	19.1
Exports of goods and services	36.8	38.4	35.4	30.6	42.0	43.5	37.8
Imports of goods and services (minus)	51.1	62.0	59.9	47.0	58.1	61.1	56.5
External balance of goods and services	-14.3	-23.6	-24.5	-16.4	-16.1	-17.5	-18.7
GROSS DOMESTIC PRODUCT	100.0	100.0	100.0	100.0	100.0	100.0	100.0

During the period 2000-2005, government expenditure was the most dynamic component of demand, together with exports of goods and services (increasing respectively by 19% and 15% per year, vis à vis an average increase in the nominal GDP by 11.2%). Final consumption increased by 13.1% (14.5% net of imputed rents), and gross fixed capital formation by 12.7%. On their side, imports grew by 15.3% at current prices. As a consequence, the total resources available for final uses (consumption, investment, and exports) increased by 12.7%, and the domestic demand (i.e. consumption plus investment), grew by 11.5% (12.4% excluding imputed rents).

The consumption expenditure increased faster than the GDP during 2001 – 2002 and slower or at approximately the same pace in the following years. Thus, the potential saving available for investments increased in the last few years. In fact, the expenditure for gross fixed capital formation increased about four times faster than the GDP in 2004 and 60% faster in 2005, confirming the deep renovation of production facilities and other infrastructures in Montenegro in the last few years.

Nevertheless, the dynamics of domestic demand were still stronger than domestic production, with the only exception being 2003, so that imports grew faster than the GDP in those years, exerting a negative effect on the Montenegrin trade balance.

THE CONTRIBUTION OF AGGREGATE DEMAND TO THE GROWTH OF NOMINAL GDP
(percentage points)

	2001	2002	2003	2004	2005	Average 2000-2005
Final consumption expenditure	29.77	10.96	6.32	8.98	9.05	13.02
Households final consumption expenditure	21.12	10.01	1.47	6.66	2.81	8.41
Government final consumption expenditure	8.65	0.94	4.85	2.32	6.24	4.60
Gross fixed capital formation	4.40	-2.14	0.14	5.64	2.41	2.09
Changes in inventories	1.69	-1.59	-1.79	-2.67	0.23	-0.83
Exports of goods and services	9.88	-1.29	-1.37	15.85	5.31	5.68
Imports of goods and services	-24.22	-0.90	7.71	-17.24	-8.30	-8.59
GROSS DOMESTIC PRODUCT	21.53	5.04	11.01	10.57	8.70	11.37
Domestic demand	34.19	6.62	4.91	12.76	10.11	13.72
External balance of goods and services	-14.34	-2.19	6.34	-1.39	-2.99	-2.91

On average, household consumption and exports made the largest contribution to the nominal growth of the GDP (8.4 and 5.7 points respectively). However, the contribution from consumption was regularly positive over time, while exports made a negative contribution to the growth of the internal income in 2002 and 2003. Government expenditure also sustained the GDP every year. Investments contributed significantly to the increase of the GDP

only in 2001 and in the last two years, while the reduction of investment expenditure slowed down the dynamics of the nominal GDP by 2 points in 2002. The trade balance served to slow down the dynamics of the nominal GDP, with the only exception being 2003, thus confirming the shortage of domestic production.

4.3. International comparisons

The system of national accounts provides the most accurate and reliable database for economic international comparisons, since the estimates derive from a common set of rules for the description of the economy. Nevertheless, any comparison among different countries should take into account the development of statistical systems, the institutional differences and different currencies and prices levels.

One of the basic and most frequently used indicators of economic development is gross domestic product per capita. Ideally, it represents the total amount of goods and services produced on average by each inhabitant within a country. It is both a measure of productivity, and of the goods and services disposable for consumption and the savings for each citizen. In the following table, all the data are reported in euro in order to improve the comparability of the results.

PER CAPITA GDP IN EURO

Country	2002	2003	2004	2005
Montenegro[1)]	2208	2435	2684	2912
Albania	1521	1622	1881	2095[2)]
Bosnia & Herzegovina	1713	1794	1953	2100
Bulgaria	2100	2300	2600	2800
Croatia	5500	5900	6500[2)]	7000[2)]
FYR of Macedonia	1981	2025	2128	2296
Hungary	6961	7376	8144	8815
Romania	2200	2400	2800	3700
Serbia	2242	2407	2643	2837
Slovenia	11866	12461	13146	13807
EU-25	21500	21800	22700	23500
EU-15	24500	24800	25800	26500

Sources: Eurostat and national statistical offices
[1)] Revised data
[2)] Preliminary estimation and forecast

The table shows that the GDP per capita in Montenegro was about one tenth of the EU-25 average in 2002, but gained position in the following years, picking up to one eighth in 2005. Compared to the other countries of the former Yugoslavia, the Montenegrin GDP per capita is far lower than that of Slovenia (about one fifth in 2005) and Croatia (about 2.4 times less), about the same as Serbia and higher that the other countries. Nevertheless, in general, the gap between the richest and poorest countries tends to reduce over time: it was about 107% of EU-25 GDP in 2002 and fell to 104% in 2005. This evidence is consistent with the convergence process among the Balkan economies.

In any case, the structures of the different economies are still very different, as shown in the following table.

THE STRUCTURE OF THE AGGREGATE OF DEMAND AS % OF GDP
(average 2002 – 2005)

Country	Final household consumption[1)]	Final government consumption	Gross fixed capital formation	Net exports
Montenegro[2)]	74.5	27.0	15.8	-18.6
EU-25	58.2	20.8	19.8	1.2
EU-15	58.2	20.8	19.6	1.4
Albania	76.2	11.0	36.9	-24.1
Bosnia & Herzegovina	91.5	23.5	20.1	-35.1
Bulgaria	70.2	18.4	23.5	-12.0
Croatia	58.6	20.6	30.5	-9.7
FYR of Macedonia	77.5	20.4	20.7	-18.6
Hungary	55.0	22.5	25.1	-2.6
Romania	68.5	17.4	22.6	-8.5
Serbia	73.8	20.2	29.2	-23.2
Slovenia	55.2	19.6	25.3	-0.2

Source: Eurostat and respective statistical offices
[1)] Including non-profit institutions serving households
[2)] Revised data

Firstly, in comparison with the EU average, the share of the final household consumption is lower in Slovenia and Hungary, and approximately at the same level of the EU average in Croatia. However, the share of these expenses in the GDP is unusually high in Montenegro, as in most other countries of South-East Europe. In particular, looking at the republics of the former Yugoslavia, the percentage of consumption in the GDP is higher in Bosnia & Herzegovina and Macedonia than in Montenegro, while it is about the same in Serbia.

As far as the final government consumption is concerned, the differences among the countries under observation are less sharp. Nevertheless, Montenegro shows the highest incidence of government consumption in the GDP, followed by Bosnia & Herzegovina and Hungary. Albania seems to be the exception within the group of South-East European countries, since the share of expenditure for the final government consumption is only 11%.

Typically, the share of gross fixed capital formation in the GDP is relatively larger in transition countries, i.e. over 20%. Nevertheless, Montenegro represents an exception, since the average share of gross fixed capital formation in the GDP, during the period under observation, is only 15.8%, which is far lower than in other countries in South-East Europe and the EU average.

All the South-East European countries have a foreign trade deficit contrary to the EU which shows a surplus. A high foreign trade deficit is a symptom of the inability of national economies to produce certain goods and services: this fact necessarily increases imports from other countries, which is insufficiently covered by exports. Montenegro has a large external deficit, but not larger than that of Albania, Bosnia & Herzegovina, and Serbia.

The growth rates of the GDP at constant prices also differ among the different countries.

REAL ANNUAL GROWTH RATE OF GDP

Country	2002	2003	2004	2005
Montenegro[2)]	1.9	2.5	4.4	4.2
EU-25	1.2	1.3	2.4	1.7
EU-15	1.1	1.1	2.3	1.6
Albania	4.2	5.8	5.7	5.8[2)]
Bosnia & Herzegovina	5.5	3.0	6.0	5.5[2)]
Bulgaria	5.6	5.0	6.6	6.2
Croatia	5.6	5.3	3.8	4.3
FYR of Macedonia	0.9	2.8	4.1	4.1
Hungary	4.4	4.2	4.8	4.1
Romania	5.1	5.2	8.5[2)]	4.1[2)]
Serbia	4.2	2.5	8.4	6.2
Slovenia	3.5	2.7	4.4	4.0

Source: Eurostat and respective statistical offices

[1)] Revised data

[2)] Estimation of preliminary data

The real GDP growth rates in the countries of South-East Europe are generally higher than those recorded in the EU. This fact is consistent with the lower initial level of economic activity in transition countries, which are now "catching up" with richer countries. The growth has been sustained, in particular by a robust internal demand for consumption. Indeed, the Montenegrin growth rate was quite moderate compared to other similar countries, particularly in 2002 and 2003, while it accelerated in 2004 and 2005, reaching the pace of Croatia, Macedonia, and Slovenia.

5. Some conclusive remarks

Nowadays it is difficult to conceive of an official statistical office which does not provide the government, the researchers, the professional users and the general public with a system of national accounts. Indeed, national accounts are a unique source of information about the economy, which is a benchmark for economic analysis and forecasting, for public debate about economic development and for the design, implementation and monitoring of economic policies. In addition, international institutions make intensive use of national accounts to fine tune their assistance programmes. Finally, national accounts are also essential in view of the possible future accession of Montenegro to the European Union.

In order to satisfy the increasing demand for information about the Montenegrin economy, national accounts must be compiled in compliance with the international standards established by the SNA93 and the ESA95. The adoption of these standards is essential both to insure the reliability of the estimation, and their comparability across different countries. As a consequence, the compilation of national accounts is a priority for any statistical agency.

Since the SNA93 and the ESA95 require the availability of statistical data collected according to internationally accepted definitions, classifications and methodologies, establishing and improving a system of national accounts also implies reforming the national statistical system and adapting it to the new requirements.

This statistical reform is also a "cultural" change for many professional and occasional users, accustomed to basing their analysis on traditional statistical indicators which are often related to the outdated system of accounts compiled according to the social product standard. This is why the aim of this publication is also to help the general public to understand at least the framework and the main concepts of the new system of national accounts. Of course, it is not intended to be a reference manual, but rather a guide through the definitions, classifications and methods used in estimating important aggregates such as the GDP, sectoral value added, final consumption, investment in fixed capital, etc.

MONSTAT has currently made available only a subset of the aggregates envisaged by the system of national accounts, mainly those related to the formation of value added, both at current and constant prices, and the estimates of final expenditure in monetary terms. Indicators regarding the distribution of the value added generated by the Montenegrin economy across the economic subjects who participate in the production process (workers, entrepreneurs, etc.) are still lacking. A detailed analysis of taxes, social contributions, pensions and other social benefits also remains to be made, together with an estimation of the transfer flows from and to the rest of the word. This is a matter for the future working plan of our statistical office.

In any case, it should be taken into consideration that national accounting, like all other branches of science, never comes to and end since it is a process of accumulating knowledge about the national economy. Typically, this process includes the continued improvement of available information, the possible refinements of methodologies and procedures, and treatment of inaccuracies as well. Thus, provisional estimates and the following revisions should be regarded as an integral part of national accounting. However revisions should not be considered a drawback of the system, but rather one of its strongest points, since, as an old Indian maxim says, the wise man is simply one who is able to recognise his errors and to improve himself. In any case, the scope of revisions will tend to reduce as the statistical system of Montenegro strengthens.

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Circulation: 200

NOTE

This publication has been elaborated within the frame of an EU-funded grant managed by the European Agency for Reconstruction aimed at supporting the statistical Office of Montenegro MONSTAT. Technical assistance was provided by the National Statistical Institute of Italy ISTAT, in co-operation with the Hungarian and Swedish Statistical Offices. However, the content of this publication is the sole responsibility of MONSTAT and can in no way be taken to reflect the views of the European Union / European Agency for Reconstruction.

The objective of this project was to help Montenegro in reaching European Union standards in macro-economic statistics.

The project focused on the harmonisation of Montenegrin system of National Accounts, and particularly of GDP compilations, with the methodology defined in the European System of Accounts (ESA95).

The Grant, funded by the European Union and managed by the European Agency for Reconstruction, was worth about € 0.5 million and had 3-year duration from 2005 till 2007 included.

CIP – Каталогизација у публикацији
Централна народна библиотека Црне Горе, Цетиње

330 . 342 : 338 . 22 | (497 . 16)

A PICTURE of Montenegro Economy : provided by the National Accounts / [responsible person Ilija Stanišić ; publication prepared by Branka Šušić-Radovanović, Snežana Bogojević] . – Podgorica : Statistical Office of Montenegro - Monstat, 2007 (Podgorica : AP Print) . – 54 str. : graf. prikazi, tabele ; 30 cm

Tiraž 200. – Bilješke uz tekst.

ISBN 978-86-85581-28-1

a) Привредни систем – Економски процеси – Црна Гора
COBISS.CG-ID 12330256