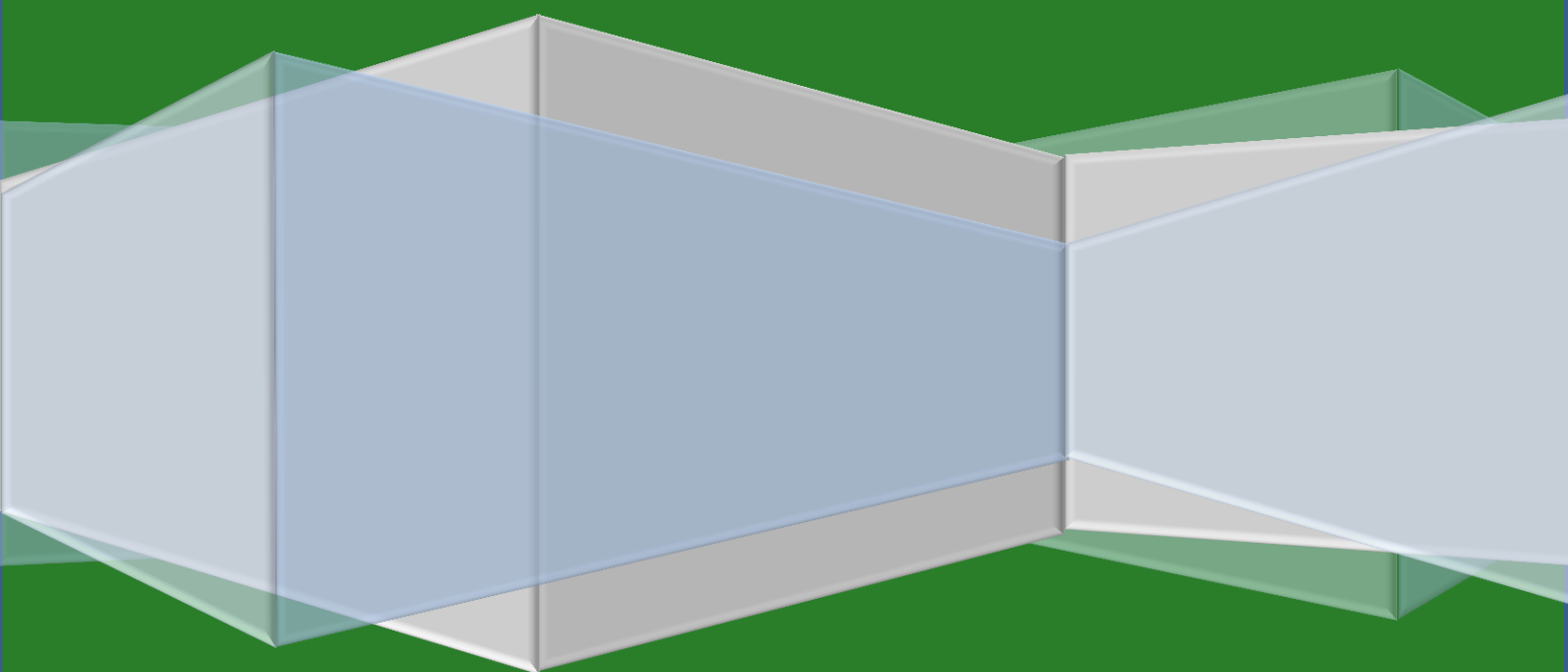


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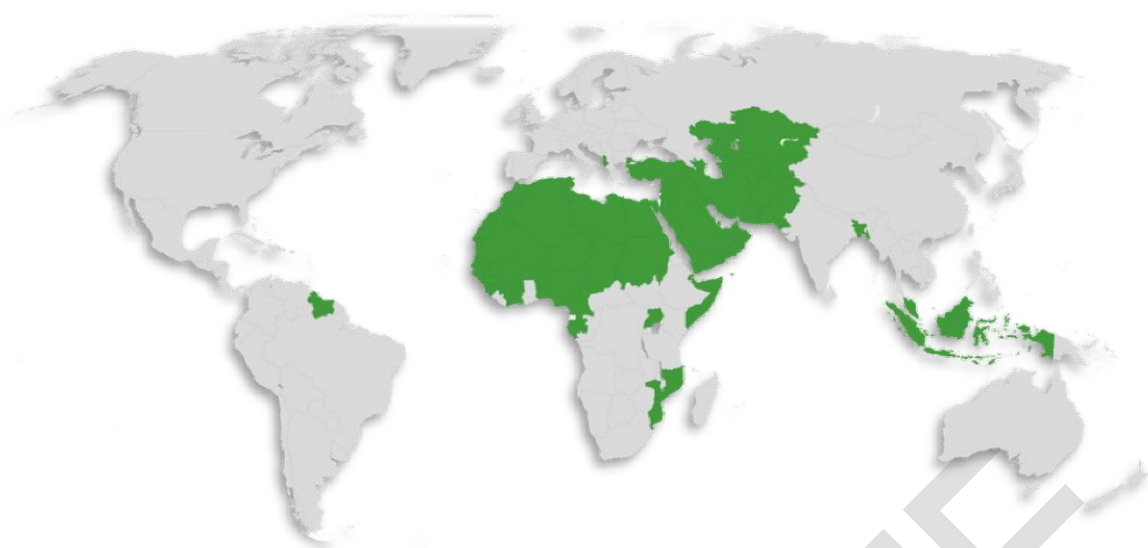
ECONOMIC STATISTICS AND SYSTEM OF MACROECONOMIC STATISTICS

TEXTBOOK



ORGANISATION OF ISLAMIC COOPERATION
STATISTICAL ECONOMIC AND SOCIAL RESEARCH
AND TRAINING CENTRE FOR ISLAMIC COUNTRIES





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TEXTBOOK

{{ABDUL ALIM BHUIYAN, BHUIYAN}}



ORGANISATION OF ISLAMIC COOPERATION

STATISTICAL ECONOMIC AND SOCIAL RESEARCH
AND TRAINING CENTRE FOR ISLAMIC COUNTRIES

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ACRONYMS

BBS	Bangladesh Bureau of Statistics
BOP	Balance of Payment
BSA	Balance Sheet Approach
CCSA	Committee for Co-ordination of Statistical Activities
COFOG	Classification of the Functions of Government
CPIS	Coordinated Portfolio Investment Survey
DCS	Depository Corporations Survey
FATS	Foreign Affiliates Statistics
FCE	Final Consumption Expenditure
FCS	Financial Corporations Survey
FP	Financial Programming
GCF	Gross Capital Formation
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GFS	Government Finance Statistics
GFSM	Government Finance Statistics Manual
GNI	Gross Domestic Income
GNP	Gross National Product
ICT	Information and Communication Technology
IIP	International Investment Position
IMF	International Monetary Fund
ISCO	International Standard Classification of Occupation
ITS	International Trade in Service
LFS	Labour Force Survey
MFSM	Monetary and Financial Statistics Manual
MSITS	Manual on Statistics of International Trade in Services
NFC	Non-financial Corporation
NPI	Non-Profit Institution
NPISH	Non-Profit Institution Serving Household
OECD	Organisation for Economic Cooperation and Development
PARIS 21	Partnership in Statistics for Development in the 21st Century
SDR	Special Drawing Right

SITC	Standard International Trade Classification
SNA	System of National Accounts
STD	Statistics Directorate
UN	United Nations
WB	World Bank

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TEMPLATE

UNIT 1

INTRODUCTION

This chapter begins by discussing what economic statistics are and why the study of economic statistics is important. Subsequent sections cover a variety of topics all basic to the study of economic statistics. One of the major functions of economic statistics is to develop concepts, definitions, classifications and methods that can be used to produce statistical information that describes the state of and movements in economic phenomena, both in time and space. This information is then used to analyse the behaviour of economic operators, forecast likely movements of the economy as a whole, make economic policy and business decisions, weigh the pros and cons of alternative investments, etc.

1.1. The Economic System

An economic system is generally defined in terms of territorial boundaries. The economic territory is the area in which the units reside, operate and pursue their interests. Traditionally, the following types of areas are identified (Giovannini, E., 2008):

- supranational economic systems: systems composed of groups of sovereign States that have come together through international treaties that set common standards for the functioning of national economic systems (for example, the group of countries that belong to the European Union);
- national economic systems: systems having an economic territory that coincides with the administrative boundaries of a sovereign State (France, Canada, etc.);
- regional economic systems: systems defined using the administrative boundaries of sub-national areas (regions, provinces, etc.);
- local economic systems: systems not defined on the basis of administrative boundaries, but in terms of specific economic, social or environmental characteristics (for example, local labour systems or industrial districts).

The characteristics of an economic system are important because they can influence the quality of the statistics describing how the system functions. For example, when economic systems are characterised by the presence of a few large enterprises, it is relatively simple to collect statistics to measure the functioning of the system, but when the economic system is composed of a myriad of small enterprises, it can become extremely difficult and/or time consuming to do so.

Similarly, in a system that has a particularly large ‘underground’ (or ‘non-observed’) economy, i.e. the economy that is not visible to the tax and administrative authorities, production of accurate economic statistics can be a challenge.

1.2. Economic Agents

The definition of economic agent is absolutely fundamental in determining the nature of the economic processes: economic agent refers to a person or legal entity that plays an active role in an economic process. An economic agent can therefore be an individual consumer who purchases goods and services, an enterprise that organises factors of production to generate income, a worker who provides his or her labour in a production process, etc. These individual agents (to which economic theory habitually attributes preferences, objectives, behaviour, etc.) are then normally grouped into institutional sectors that represent groupings of institutional units (corporations, households, general government, etc.), each of which (Giovannini, E., 2008):

- is entitled to own goods or assets in its own right; it is therefore able to exchange the ownership of goods or assets in transactions with other institutional units;
- is able to take economic decisions and engage in economic activities for which it is held to be directly responsible and accountable by law;
- is able to incur liabilities on its own behalf, to take on other obligations or future commitments and to enter into contracts;
- has either a complete set of accounts (including a balance sheet of assets and liabilities) or it would be possible and meaningful, from both an economic and legal viewpoint, to compile a complete set of accounts for the unit, if required.

These institutional units are the categories of economic agents normally referred to in the System of National Accounts (SNA). All the agents within a given territory (a region, country, etc.) and the ways they interact with each other and with other agents outside that territory are defined as an economic system.

Institutional units are aggregated according to the principle function they perform. In this regard, a distinction is made between three ‘institutional sectors’ (Giovannini, E., 2008):

- households, which perform three principle functions: 1) consume the goods and services produced by other institutional sectors; 2) produce goods and services that can be sold; and 3) acquire real and financial assets. The household sector also includes non-profit institutions serving households, which provide non-market (i.e. not intended for sale) services consumed by households;

- enterprises, which produce goods and services intended for sale to generate profits and which acquire real and financial assets. This sector also includes non-profit institutions serving enterprises, which produce services intended for sale to be consumed by companies;
- general government, which, in addition to fulfilling its political responsibilities and role of economic regulation, produces principally non-market services (possibly goods) for individual or collective consumption and redistributes income and wealth.

Transactions between resident and non-resident units are normally measured by aggregating all of the latter into a single institutional sector, defined as rest of the world.

From a statistical standpoint, a **household** consists of a small group of people sharing the same living accommodation, who pool some, or all, their income and wealth and who consume certain types of goods and services collectively, mainly housing and food. This group of people can be bound by ties of marriage, family relationship, affinity, adoption, guardianship or ties of affection, and they habitually reside in the same municipality (even if they are not yet registered by the municipality as residents). A household may consist of a single person. Someone who is temporarily absent remains a member of the household even if he or she is living in a different accommodation, be it in the same municipality or in another municipality within the same country or abroad.

The **enterprise** sector includes various types of entities. The term enterprise in the strictest sense refers to the organisation of an economic activity on a professional basis for the purposes of producing goods or providing services intended for sale. An enterprise has a certain autonomy regarding its choices in the field of production, sales and distribution of profits. The entity responsible for the enterprise consists of one or more persons acting individually or in partnership or of one or more legal entities.

Enterprises may be classified on the basis of many characteristics. In the SNA, enterprises are aggregated in the institutional sector of 'corporations', which comprises corporations and unincorporated enterprises. Moreover, quasicorporations are unincorporated enterprises that function as if they were corporations, and which have complete sets of accounts, including balance sheets. Within the institutional sector of corporations two typologies are distinguished:

- non-financial corporations: corporations whose principal activity is the production of market goods or non-financial services;

- financial corporations: institutional units principally engaged in financial intermediation or in auxiliary financial activities.

The **general government** sector comprises:

- all institutional units that produce non-market goods and services intended for collective and individual consumption and financed primarily by compulsory payments by units belonging to other sectors;
- all institutional units whose main function is to redistribute the country's income and wealth.

In particular, the institutional sector of general government is subdivided into the following subsectors:

- central government: this includes all the administrative bodies of the central State and the other central bodies whose authority normally extends to the entire economic territory, except for central social security funds;
- local government: this includes public bodies (except for social security funds) whose authority extends only over part of the economic territory;
- social security funds: this includes all central, state and local institutional units whose main activity consists of granting social benefits funded wholly, or in part, by specific groups of the population, according to legislative or regulatory provisions. This subsector includes government administrations responsible for setting, or approving, contributions and benefits, independently from their role as a supervisory or employing body.

1.3. The International Statistical System

Over the years, international organisations and national statistical authorities have developed new methodological approaches and databases in many other fields (education, health, the environment, etc.), that go beyond the sectoral aspects of economic statistics. Cooperation between international organisations and national statistical institutes led to the creation of what is called the 'international statistical system' (Giovannini, E., 2008).

Given the large number of international organisations in existence worldwide, the sources of international statistics now available are very numerous. Their sheer number represents an unprecedented wealth of information, but this requires a capacity on the part of users to be able to select, from sources that are diverse and sometimes contradictory, the data most relevant to their own needs. In practice, cooperation between international organisations has not yet reached the point where overlap or duplication of activities has been eliminated, while the availability of

new information and communication technologies (ICT) has made it easier to build databases, which have proliferated. Quite frequently, the databases of different international bodies contain references to the same variables, but attach a different value to them.

To strengthen the statistical capacity of developing countries, in 1999 the OECD, the IMF, the European Commission, the WB and the UN founded the Partnership in Statistics for Development in the 21st Century (PARIS 21). The mission of PARIS 21 (www.paris21.org) is to act as a catalyst for promoting a culture of evidence-based policymaking and monitoring in all countries, and especially in developing countries, and to foster more effective dialogue among those who produce development statistics and those who use them, through facilitating international events, supporting country-based activities, regional workshops, and subject matter task teams. The activities of PARIS 21 are organised by a Secretariat based in OECD and supervised by a Steering Committee, an international group of stakeholders with representatives from developing countries from each region of the world, bilateral donors, and multilateral institutions.

1.4. The OECD Statistical System

The Organisation for Economic Co-operation and Development was founded in 1961, and its current members are 30 of the world's most developed countries. The aim of the Organisation is to assist in the achievement of sustainable economic development, the improvement in standards of living, and the growth of international trade. Where statistics are concerned, the OECD is active in the economic, social and environmental fields, with a total of over 100 various activities. The OECD plays a part in the development of international standards by producing statistics on a variety of subjects, and compiling and publishing a wide range of statistical data, produced mostly by national authorities (www.oecd.org/statistics), and promoting the gathering in member countries of the statistics needed to produce its analytical reports and draw up guidelines on economic, social and environmental policy. The organisation of statistical activities at the OECD is based on a 'decentralised model', whereby various statistics are developed both by the Statistics Directorate and by substantive Directorates responsible for analytical studies and policy analyses and recommendations (Giovannini, E., 2008).

The Statistics Directorate (STD) was created in 1992 with the mandate: a) to improve the supply of relevant and timely statistical information to analysts and policy makers inside and outside the Organisation; b) to develop international statistical standards, systems and classifications in collaboration with other international statistical agencies; c) to improve co-ordination between

the statistical activities of the OECD and those of other agencies; and d) to provide a mechanism for co-ordinating statistical activities within the Organisation. From a substantive point of view, STD is responsible for macroeconomic statistics (national accounts, short-term economic indicators, international trade, etc.) and for some social (i.e. labour force) and business statistics. In addition, STD plays a key role in promoting internal co-ordination and co-operation with other international organisations.

OECD statisticians are committed to implementing the “Principles for Statistical Activities Carried out by International Organisations” prepared in 2006 by the Committee for Co-ordination of Statistical Activities (CCSA). In addition, OECD statisticians are committed to carry out their work according to the International Statistical Institute’s declaration on professional ethics. The actual implementation of these principles and quality dimensions described in the “Quality Framework for OECD Statistics” is undertaken through the guidelines and procedures provided in the Framework for all OECD statistical activities. To face new challenges, such as the evolution of the international statistical system and especially the increase and diversification of users’ needs, the OECD Statistics Strategy was launched in 2001, with the ultimate goal of improving the overall quality of OECD statistics.

1.5. The European Statistical System

The European institutions play an increasingly important role in international statistics, especially the European Commission and the European Central Bank. The process of European integration began in the 1950s and advanced progressively over the next 30 years, to be re-launched in the 1990s with the construction of the European Union, and most recently extended from 2004 with the accession of 12 new member countries. Integration has had a significant influence on the statistical activities of the European countries, producing major changes both in the internal organisation of the Commission, and in its relations with the national statistical authorities (Giovannini, E., 2008).

First among the European institutions in the field of statistics is the Statistical Office of the European Communities (Eurostat), one of the Directorates General into which the Commission is broken down. Eurostat gathers and disseminates large quantities of data produced by the national statistical institutes and various other public bodies (www.ec.europa.eu). Eurostat also supervises the production of ‘Community statistics’ according to agreed upon definitions and classifications, coordinating the other Directorates General of the European Commission active in the statistical field.

Much of the work of Eurostat is directed at verifying the quality of the statistics submitted by the member states, which are obligated to follow Eurostat recommendations for improving the comparability and quality of the data. In the event this is not done, Eurostat (in its capacity as part of the European Commission) can institute proceedings for breach before the European Court of Justice to oblige the country to adopt the measures requested.

1.6. Common Features of Macroeconomic Statistics

Macroeconomic statistics are aimed at one broad purpose – to serve decision makers – and this purpose can best be accomplished if the statistics are, as far as practicable, mutually consistent. It was with this objective in mind that the IMF revised and harmonized the manuals for the balance of payments, government finance, and monetary statistics with the 1993 as well as 2008 SNA.

This section discusses common features of macroeconomic statistics: institutional units and sectors; residence; stocks (assets/liabilities), economic flows, and their integration; accounting rules; and market price valuation and conversion procedures.

Institutional Units and Sectors

The basic building block of macroeconomic statistics is the institutional unit. This section describes the two types of units and the five sectors into which these units are grouped.

Units

An institutional unit is defined as an economic entity capable, in its own right, of owning assets, incurring liabilities, and engaging in other economic activities and transactions with other entities. In other words, an institutional unit is an entity that can act economically on its own behalf and be held directly responsible and accountable for those actions. In particular, on its own behalf, it is able to own assets and incur liabilities (IMF, 2007).

Two main types of entities qualify as institutional units – households and legal and social entities whose existence is recognized independently of the persons, or other entities, that may own or control them.

In the first type, individual members of multiperson households are not treated as separate institutional units because they own many assets jointly, incur liabilities jointly, often pool

income, and decide collectively about expenditures for the household as a whole. The second type of unit comprises corporations, government units, and nonprofit institutions. Corporations produce goods and services for the market and may be a source of profit to their owners, whereas government units primarily produce goods and services on a nonmarket basis. Nonprofit institutions (NPIs) may be market or nonmarket producers but cannot be a source of profit to their owners. In much the same way as corporations, some unincorporated entities belonging to households or government units may produce market goods and services. If they have a complete set of accounts, or if it is possible and meaningful to compile a complete set of accounts, statisticians consider them to be quasi-corporations and treat them as corporations.

Sectors

Institutional units are grouped into five mutually exclusive institutional sectors of the economy according to their different economic objectives, functions, and behavior. The sectors are Nonfinancial corporations sector, Financial corporations sector, General government sector, Nonprofit institutions serving households (NPISH) sector, and Household sector (IMF, 2007).

Among the five, the two sectors of corporations comprise not only corporations but also quasi-corporations and NPIs that are market producers. The general government sector comprises general government units that are not treated as quasi-corporations and nonmarket NPIs that are controlled and mainly financed by government units. The NPISH sector comprises nonmarket NPIs not controlled by government. Finally, the household sector comprises households and their unincorporated enterprises that are not treated as quasi-corporations.

Residence

All macroeconomic statistics relate to an economy – defined to comprise all its resident institutional units. Residents designate institutional units that have a closer tie with the economic territory of the country in question than with any other country. Residence is not based on nationality or currency of denomination; rather, it is based on where the unit's center of economic interest lies. As for nonresidents, units that are not residents of the given economy are residents of the rest of the world and are termed nonresidents (IMF, 2007).

The economic territory of a country consists of the geographic territory administered by a government. Within the territory, persons, goods, and capital circulate freely. It includes airspace, territorial waters, and continental shelf lying in international waters over which the country enjoys exclusive rights or over which it has, or claims to have, jurisdiction with respect

to economic exploitation. It also includes territorial enclaves in the rest of the world, such as embassies, consulates, and military bases.

Regarding economic interest, an institutional unit has a center of economic interest within a country when there exists some location – dwelling, place of production, or other premises – within the economic territory of the country from which the unit engages in economic activities significantly, either indefinitely or over a finite but long period. Normally, a one-year rule is applied.

Stocks, Flows, and Their Integration

Stocks

Stocks, another common feature of the macroeconomic statistics, are economic magnitudes measured at a point in time. That is, they are positions in, or holdings of, assets and liabilities at a point in time. Stocks are recorded in the balance sheet at the beginning and end of the accounting period. Stocks are to be valued at current market prices on the day the balance sheet is drawn up (IMF, 2007).

Assets are either nonfinancial (such as land, machinery and equipment, and inventories) or financial (generally representing claims of one unit on another), whereas liabilities are financial obligations of one unit to another and are, therefore, the counterpart to financial assets.

Nonfinancial assets include produced assets, such as machinery and equipment, and nonproduced assets, such as land, and also include intangible assets, such as computer software.

Most financial assets involve claims arising from one institutional unit that is providing resources to another unit that must be repaid. The unit providing the resources has a claim (asset), and the unit that must repay has a liability, displaying an asset/liability symmetry.

Typical examples of financial assets/liabilities are currency (an asset for the holder and a liability for the central bank); deposits (an asset for the depositor and a liability for the bank); and loans (an asset for the lender and a liability for the borrower). Securities display the financial asset/liability symmetry as well. Financial assets also include the ownership of corporations in the form of shares issued by the corporation. The shares are considered to be financial claims of the owners and liabilities of the corporation.

Further examples of financial assets are monetary gold and SDRs (special drawing rights, the IMF's unit of account), considered assets by convention and used by monetary authorities to settle international payments, although they do not reflect claims on other designated units. Monetary gold consists only of gold held by the central bank or government as part of official reserves. SDRs are international reserve assets created by the IMF and allocated to members to supplement existing official reserves.

Flows

Compared with stocks, flows are economic magnitudes measured with reference to a period of time, and they have two types – transactions (further delineated into exchanges or transfers) and other economic flows (further delineated into holding gains and losses and changes in the volume of the asset). Flows fully reflect the change in the value of the stock of an asset or liability during the accounting period. Compilers measure the two types of flows at market prices at the time the transaction or other economic flow takes place (IMF, 2007).

Transactions are interactions among institutional units by mutual agreement. They may be of two kinds – exchanges or transfers.

The first kind of transaction, an exchange, involves one party providing a good, service, labor, or asset to another party and receiving a counterpart in return. For example, a unit may exchange goods and services for a financial asset, or it may receive cash (a financial asset) in exchange for the obligation to repay the cash (a loan liability).

The second kind, a transfer, involves one party providing a good, service, labor, or asset to another without receiving anything in return. An example is one government donating food and medical supplies to another in response to a natural disaster.

The other type of flow, other economic flows, is all the changes in the stock of an asset (or liability) that do not arise from transactions. The two kinds are holding gains and losses and changes in the volume of the asset.

The first kind of other economic flow, a holding gain or loss, arises when the market price of the asset changes during the period, including changes in the domestic value of assets denominated in a foreign currency when the exchange rate of that currency changes.

The second kind, a change in the volume of an asset, covers a wide variety of events, including the discovery of new natural resources, depletion of subsoil assets, destruction of assets through natural disaster, and debt write-off.

Integration of stocks and flows

It follows from the above definitions of stocks and flows that the total change in the stock of each asset or liability from the beginning of a period to the end of the period is explained fully by the flows. That is,

Stock (end) = Stock (beginning) + Transactions + Other Economic Flows.

This integration of stocks and flows provides a useful check on the accuracy of the data for both stocks and transactions by revealing information on the other economic flows. For instance, analysts could check the size of the revaluations and other volume changes to ensure they are consistent with known economic conditions (IMF, 2007).

Accounting Rules

A fourth common feature of macroeconomic statistics is accounting rules. All systems of macroeconomic statistics are based on the double entry accounting system, whereby the accountants have recorded every flow twice – as a debit entry and as a credit entry. The accounting rule concept also hinges on accrual and cash recording (IMF, 2007).

Debits and credits

The debit entry refers to the increase in an asset, decrease in a liability, or decrease in net worth (for example, an expense) of the unit. The credit entry refers to the counterpart increase in a liability, decrease in an asset, or increase in net worth (for example, revenue) of the unit (IMF, 2007).

Credits include

- Sales of goods and services (including exports),
- Property income receivable,
- Compensation of employees receivable by households,
- Transfers receivable (including tax revenue for government),
- Increases in liabilities,
- Decreases in nonfinancial assets (including inventories), and
- Decreases in financial assets.

Debits include

- Purchases of goods and services (including imports),
- Property income payable,
- Compensation of employees payable by employers,
- Transfers payable,
- Decreases in liabilities,
- Increases in nonfinancial assets (including inventories), and
- Increases in financial assets.

Accrual and cash recording

Units record flows on an accruals basis, and/or a cash basis, in each macroeconomic statistical system. That is, they record them when units exchange, transform, create, transfer, or extinguish economic value, which is not necessarily when the units make payment. The accruals basis ensures consistency of recording among units and over time (as well as from country to country) and can completely cover economic events. On the other hand, a cash basis of recording records events only when cash is received or disbursed; it omits all noncash transactions (such as barter and in-kind transfers).

In many cases, under both accrual and cash recording, the timing will be the same for a transaction, such as the cash payment for the provision of a service. However, in other cases, the timing can differ considerably, such as provision of goods and services on credit or the recording of interest on discounted securities (IMF, 2007).

Market Price Valuation and Conversion Procedures

Finally, another common feature of macroeconomic statistics sets is valuation and conversion procedure. In principle, units should measure all transactions and position (stock) data on the basis of market prices. This means they value transactions at the actual price agreed upon by the parties (in other words, amounts of money that willing buyers pay to acquire something from willing sellers). At the same time, they value the stock of assets and liabilities on the basis of the market prices in force at the time to which the balance sheet relates (IMF, 2007).

However, units cannot always implement the market price principle. Therefore, the staff who record macroeconomic data may find it necessary to resort to alternative measures or proxies in cases where no actual market prices have been set.

Compiling macroeconomic accounts is also complicated because, initially, units may express the transactions or stocks of assets and liabilities in different currencies. To convert these currencies into the unit of account (normally the domestic currency) adopted for compiling these statements, compilers use the most appropriate exchange rates for conversion purposes – those rates prevailing on the transaction date or those prevailing on the reporting date for valuation of stocks. A rule of thumb recommends the midpoint between buying and selling rates.

1.7. Use and Practical Application of Macroeconomic Statistics

Macroeconomic statistics are essential for evaluating a country's economic performance and for making cross-country and multilateral comparisons. They also provide the framework for planning, formulating, and monitoring the implementation of economic and budgetary policy. Further, they serve the needs of market participants through providing timely and transparent information (IMF, 2007).

Two examples of the use of the integrated macroeconomic accounts in the IMF's surveillance activities are the financial programming (FP) exercise and, more recently, the balance sheet approach (BSA) to macroeconomic analysis.

Under the FP exercises, analysts evaluate the linkages between the main macroeconomic accounts of an economy to assess the impact of exogenous shocks and to formulate appropriate policy responses to achieve specified goals (stabilization, growth, and so forth), including by preparing alternative prospective scenarios for the medium term.

The BSA, on the other hand, exploits information from sectoral and national balance sheets to examine the countries' vulnerabilities, including vis-à-vis nonresidents. In essence, the BSA focuses on identifying and analyzing the vulnerabilities of an economy to financial and economic shocks through the evaluation of the balance sheets of its key institutional sectors. Using this approach, analysts evaluate the (1) financial position of the economy's key institutional sectors; (2) possible mismatches in maturity, currency, and term structure of assets and liabilities; and (3) potential propagation of sectoral weaknesses owing to linkages among balance sheets of different sectors. Vulnerability indicators point to potential risks that could

trigger liquidity and solvency problems at times of stress. The financial crises of the late 1990s underscored the importance of balance sheet data as critical elements for vulnerability analysis.

TEMPLATE

UNIT 2

NATIONAL ACCOUNTS STATISTICS

Many early writers on economics, such as Adam Smith, focused on national wealth as an indicator of economic strength and performance. Later writers on economic theory, such as Keynes, Frisch, and Tinbergen, focused on economic flows. One major advance that the System of National Accounts 1993 (1993 SNA; Commission of the European Communities and others, 1993) made was to effectively marry these two approaches by linking in detail the accounts that present transactions and other economic flows with the balance sheets that present stocks of wealth. At 1993 SNA has been revised as 2008 SNA.

The 1993 SNA provides readers with a comprehensive and systematic framework for collecting, presenting, and analyzing macroeconomic statistics. In a sequence of accounts, the framework presents a mass of details about how an economy works and how economic agents interact. Through this system, the 1993 SNA enables users to analyze the production and use of goods and services and to measure the gross domestic product (GDP) – the basic production concept of the 1993 SNA. It enables users to analyze the incomes generated by that production, earned from the ownership of assets and redistributed within the economy. It also allows users to identify the capital and financial flows that take place.

2.1. Gross Domestic Product (GDP)

To measure GDP, analysts use three standard approaches: the production, income, and expenditure approaches. In the 1993 SNA framework, the production approach is presented in the production account, the income approach in the generation of income account, and the expenditure approach in a rearrangement of the goods and services account (IMF, 2007).

GDP is the sum of value added produced by all institutional units resident in the domestic economy plus the value of taxes less subsidies on products. In the definition, value added equals the value of output less the values of goods and services (intermediate consumption) used to produce this output.

To understand the basic principles for measuring GDP, let us assume that a country produces wheat, cotton, steel, flour, bread, cloth, dresses, cigarettes, and automobiles. How is this

production to be accounted? An establishment or enterprise may use some of the goods produced by other establishments as its inputs. Wheat is used in the production of flour, cotton in the production of cloth, and so on. To avoid any duplication in accounting, recorders must subtract from the value of the output of all resident producing units their intermediate consumption (the inputs of goods and services used up in the process). The measure would be of the value added to intermediate consumption to generate the output.

Production Approach

The above approach to measuring GDP is termed the production approach and is presented in the production account of the system. GDP is termed gross because no deduction has been made for the consumption of fixed capital (depreciation) used in production. It is useful to note that GDP is measured at market prices (IMF, 2007).

Income Approach

An alternative approach to measuring GDP is to sum the incomes generated by the productive process. Called the income approach, the method involves summing compensation of employees, taxes less subsidies on production, and the operating surplus/mixed income of the producer. Mixed income simply refers to the surplus owned by households as producers – economists consider it a combination of compensation of employees and operating surplus. Compensation of employees, a broad term, includes not only wages and salaries paid directly but also various indirect benefits of employment, such as employers' contributions to social security and pension funds. This approach is presented in the generation of income account of the system (IMF, 2007).

Expenditure Approach

A third method of calculating GDP is to sum the final use of the output produced. Called the expenditure approach, this involves a summation and a subtraction: (1) summing the values of (a) final consumption (that is, goods and services used up by individual households or the community to satisfy their individual or collective needs or wants), (b) gross capital formation (that is, gross fixed capital formation, changes in inventories, and net acquisition of valuables), and (c) exports of goods and services and (2) subtracting imports of goods and services. Gross fixed capital formation is measured by the total value of a producer's acquisitions, less disposals, of fixed assets during the accounting period plus certain additions to the value of nonproduced assets realized by the productive activity of institutional units (IMF, 2007).

In algebraic terms, this can be presented as

$GDP = C + I + X - M$, where C is final consumption expenditure of households, government and NPISH; I is gross capital formation; X is exports of goods and services; and M is imports of goods and services.

2.2. Gross National Income (GNI)

In a number of countries, an alternative measure known as gross national product (GNP) is emphasized. It is equal to GDP plus net primary income flows with the rest of the world (ROW). In the 1993 SNA, GNP is more correctly referred to as gross national income (GNI).

In algebraic terms, this can be presented as

$GNI = GDP + \text{primary income receivable from ROW} - \text{primary income payable to ROW}$

2.3. Consumption

In SNA, consumption treated as final consumption expenditure (FCE) and is broken into final consumption expenditures of resident households (HH), general government (GG) and NPISH units.

1. Final consumption expenditures of the HH sector include the value of goods and services that are purchased, actually consumed and ultimately paid for by resident households during the accounting period.
2. Final consumption expenditures by GG include the central government, state/provincial and/or local governments. Final consumption expenditures of GG are divided into two parts – one part serving the collective needs of the members of the community and the other part serving individual needs of resident households.
3. Final consumption expenditures of NPISH are assumed by SNA to serve individual needs of resident households

Final consumption expenditures of households

Household final consumption expenditures include the following:

1. All purchases of consumer non-durable and durable goods except dwellings, which are treated as capital goods of the unincorporated enterprises of the HH sector, producing housing services.
2. Imputed purchases of consumer durables by paying in installment. The value of goods bought must be calculated and imputed as individual final consumption.
3. Imputed gross rental for owner-occupied housing

4. Own-account final consumption of goods by owners of unincorporated enterprises
5. Bartered consumer goods and services (net)
6. Domestic services provided by domestic servants
7. Goods and services in kind provided by enterprises as a form of compensation of employees
8. Imputed financial intermediary service charges (of banking, insurance, pension funds etc.)
9. Purchases minus sales of second-hand goods by households except dwellings.
10. Purchases by residents abroad
11. (Minus) purchases by non-residents at home

Final consumption expenditures of general government

The final consumption expenditures of the general government sector are divided into individual final consumption and collective final consumption expenditures.

Individual final consumption expenditures of GG include individual goods and services that are essentially private, as distinct from public goods and have the following characteristics:

1. It must be possible to observe and record the acquisition of the goods or services by an individual household or member thereof and also the time at which it took place.
2. The household must have agreed to the provision of goods or services and take whatever action is necessary to make it possible for example, by attending a school or clinic.
3. The goods or services must be such that its acquisition by one household or person precludes its acquisition by other households or persons.

The following expenditures by GG are regarded as individual consumption expenditures:

1. Health service including public health
2. Education
3. Recreation, culture and religion
4. Social security and welfare services
5. Housing, refuse collection and sewerage services.

The overhead expenses by the ministries in connection with the administration and functioning of the institutions are also included in the individual goods and services.

The final consumption expenditures by GG for individual goods and services are called social transfers in kind by the GG in the SNA. The social transfers in kind provided by the GG to individuals can take three different forms whereby GG:

- Buys goods and services in the market and transfers them to individuals

- Partly or fully reimburses goods and services bought by individuals
- Fully operates and pays for the facilities that produce non-market goods and services and provides them at prices that are not economically significant to individuals.

The first two items are termed social benefits in kind in SNA as the recipients have little or no choice. They are not part of the output of GG services, as the government unit does not engage in any further processing of such goods or services. The third item constitutes transfers of individual non-market goods and services and is part of the output of GG service. The part of the social transfers in kind funded by the GG is individual final consumption of GG and the part paid by HH is final consumption of HH.

Collective final consumption expenditures of the GG include only services (there are no collective goods) with the following characteristics:

- Collective services can be delivered simultaneously to every member of the community or to a particular section of the community
- The use of such services is usually passive and does not require any explicit agreement or active participation of all the individuals concerned
- The provision of collective service to one individual does not reduce the amount available to others in the same community or a section of the community. There is no rivalry in acquisition.

Included in collective services are the provision of security and defense, public administration, public research and development, maintenance and improvement of law and order, general administration including setting and enforcing policies, standards and regulation of public health, education etc. Collective final consumption of GG includes all current expenditures that are not current transfers or individual final consumption expenditures.

Final consumption expenditures of NPISH

Final consumption expenditures of NPISH are equal to gross output of NPISH less sales plus social transfers in kind. If own-capital formation is part of the output, it is deducted to obtain final consumption. In short, all output of NPISH, except the part that is sold is treated as individual final consumption of NPISH.

Unlike GG there is however, no collective consumption of NPISH. Activities of NPISH in Bangladesh are diverse and include health and educational services, recreation, religious and welfare services. In addition, political parties, civic associations, religious, professional and labour organizations and other activities such as trust funds are parts of NPISH activities.

Final consumption expenditures and actual final consumption

The distinction between final consumption expenditures and actual final consumption is an extension of the distinction between collective and individual final consumption in SNA- 93. Final consumption expenditures of an institutional sector (other than NFC that does not have final consumption expenditure) are the expenditures incurred freely by the sector. Actual final consumption refers to taking possession of goods and services or the consuming of goods and services by the sector. Actual final consumption aims at capturing the consumption of goods and services that are provided in kind by other sectors.

The actual final consumption of HH sector includes:

- HH final consumption expenditures
- Final consumption expenditures of NPISHS
- Individual final consumption expenditures of GG

The last two items are called social transfers in kind in SNA-93.

All of the final consumption of NPISH is treated as social transfers in kind. The actual final consumption of NPISH is therefore zero. The actual final consumption of the GG is equal to its collective final consumption expenditures.

2.4. Savings

Saving is the balancing item in the two use of income accounts. Its value is the same whether it is derived as disposable income less final consumption expenditure or as adjusted disposable income less actual final consumption (in both cases, after making the adjustment for the change in pension entitlements just described). It is noted, non-financial and financial corporations have no final consumption expenditure or actual final consumption. Their net saving is equal to their net disposable, or adjusted disposable, income (apart from the adjustment item for pension entitlements).

Saving represents that part of disposable income (adjusted for the change in pension entitlements) that is not spent on final consumption goods and services. It may be positive or negative depending on whether disposable income exceeds final consumption expenditure, or vice versa. Assuming that saving is positive (and in the absence of capital transfers), the unspent income must be used to acquire assets (possibly only an increase in cash) or reduce liabilities. If saving is negative, some financial or nonfinancial assets must have been liquidated, (including a run down of cash) or some liabilities increased. If saving is zero, final consumption expenditure equals disposable income plus the change in pension entitlements.

2.5. Investment

According to SNA, investment is defined as Gross Capital Formation (GCF) which includes Gross Fixed Capital Formation (GFCF), Changes in Inventories (CII), and Acquisition less disposal of valuables.

Gross Fixed Capital Formation (GFCF)

GFCF is measured by the total value of a producer's acquisition, less disposal of fixed assets during the accounting period plus certain additions to the value of non-produced assets (such as land) realized by productive activities of resident producers. Fixed assets are tangible or intangible assets, which are outputs of production processes. They must have a life span of not less than one year. GFCF of institutional sectors may include existing or second hand goods, but for total economy as a whole, GFCF includes only new expenses on fixed capital formation and net second-hand capital goods imported from abroad. For second-hand capital goods that already exist in the economy, a purchase by one institutional sector must be netted out by a sale of the same value by another institutional unit. The increase to gross capital formation is the transfer cost only.

GFCF includes the following:

1. Acquisition, less disposal, by enterprises of new and existing tangible fixed assets (dwellings, other buildings and structures, machinery and equipment) and by households of dwellings including purchases, barter transactions, own gross fixed capital formation and capital transfers in kind.
2. Acquisition, less disposal, of intangible fixed assets (mineral exploration, computer software, entertainment, literary or artistic originals) including purchases, barter transactions, own gross fixed capital formation and capital transfers in kind.

3. Transfer costs of existing tangible and intangible fixed assets. The transfer costs cover expenditures for agents' or lawyers' fees, dealers' margins or commissions stamp duties and others.
4. Major improvements to tangible non-produced assets including land and costs associated with the transfers of ownership of non-produced assets.
5. Expenses to transform existing capital goods into different kinds of capital goods such as major renovations and extensions
 - Expenses to transform natural assets such as draining, reclamation, clearing and leveling of land for the purposes of agriculture and construction, clearing for planting of forests etc
 - Changes in animal stock which are not reared primarily for purposes of meat production; these consist of draught animals, animals used for sport or entertainment, cattle used to produce dairy products or wool and breeding stocks.
6. Acquisition of produced fixed assets under financial leasing.

GFCF should be prepared separately by industries as well as for the institutional sectors i.e. HH sector, NFC sector, FC sector, GG sector, and NPISH sector.

Changes in inventories (CII)

Changes in inventories held by producers, GG and NPISH are the second main component of GCF and cover the following:

1. Inventories or stocks of raw materials and stocks of semi-processed or finished products purchased by producers for use as input into their production process.
2. Work-in-progress which refers to goods produced during the accounting period but in need of further processing to be saleable in the market
3. Livestock raised for slaughter (breeding stock, draught animals, dairy cattle and animals raised for wool and hair clips are treated as fixed assets).
4. Inventories of finished products produced as output but unsold.

UNIT 3

LABOUR FORCE STATISTICS

Another important feature of macroeconomic statistics is better knowledge of developments in the labor market. That is, with aggregate data on employment (persons employed, hours worked, earnings, and so forth), analysts have crucial inputs for assessing economic performance. Oftentimes, with these indicators, they may gauge the effectiveness of labor market policy, using data on labor market demand (employment, job vacancies, labor costs) and labor market supply (unemployment, labor force participation).

Labour force in any country play significant role in of development by producing goods and services. The experience of the developing role indicates that the countries which are developing at a higher rate are due to their skilled labour force. The glaring examples are China, Korea, India, Taiwan, Hongkong and Malaysia.

3.1. Labour Force Participation

The labour force consists of those who are actively prepared to make their labour available during any particular reference period for producing goods and services that are included within the production boundary of the SNA. The labour force is further divided into those who are employed and those who are unemployed. Thus the population of the country can be subdivided into three categories; employed, unemployed and not in the labour force. A person's status depends on their activity (or lack of it) during a particular reference period (usually a week).

A fundamental concept is the economically active population – defined as all persons who, during a reference period, furnish the supply of labor for the production of goods and services, as defined by the 1993 SNA. Because the labour force is defined with reference to a short period, the number of persons in the labour force at any time may be smaller than the economically active population. For example, seasonal workers may be included in the economically active population but not in the labour force at certain times of year (IMF, 2007).

The labour force consists of four groups of persons; residents who are employees of resident institutional units, residents who are employees of non-resident institutional units, unemployed residents and self-employed persons. Employment in the SNA is defined as all persons, both

employees and self-employed persons, engaged in some productive activity that falls within the production boundary of the SNA and that is undertaken by a resident institutional unit.

Employees are persons who, by agreement, work for a resident institutional unit and receive remuneration for their labour. Self-employed persons are persons who are the sole or joint owners of the unincorporated enterprises in which they work, excluding those unincorporated enterprises that are classified as quasi-corporations. A self-employed person is necessarily associated with a resident household. If such a person provides goods and services abroad, these are recorded as exports.

The currently economically active population (also known as the labor force) gives a measure of the number of persons furnishing the supply of labor at a given time. It comprises two mutually exclusive categories – employed and unemployed. For practical reasons, the labor force statistics framework specifies a minimum age for measuring economic activity – thus defining the working-age population (which may differ from country to country).

3.2. Employment and Unemployment

Employed persons are those above the minimum specified age who performed some work for pay, profit, or family gain during the specified reference period or who had a paid job or an enterprise but were temporarily not at work for some specified reason. The international standards further specify that, for operational purposes, the notion of “some work” may be interpreted as work for at least one hour. This criterion is intended to cover all types of work, especially types having irregular features, and is a necessary criterion if total employment is to correspond to aggregate production (IMF, 2007).

The international standard definition of unemployment is based on three criteria to be satisfied simultaneously. Unemployed persons are those who are

- Without work (were not in paid employment or self-employment as specified by the definition of employment),
- Currently available for work (were available for paid employment or selfemployment during the reference period), and
- Seeking work (had taken specific steps in a specified recent period to seek paid employment or self-employment).

Persons in the working-age population who satisfy neither the definition of employment nor that of unemployment are classified as economically inactive or not in the labor force.

3.3. Labour Market Situation/Information

The Labour Market Information (LMI) Service helps statisticians/researchers find information about occupations and labour market trends and outlooks, including skill or labour shortages and surpluses, and statistics on unemployment rates and the working-age population. The LMI is the official source that promotes economic health by providing information to help people understand economy and make informed labor market choices. Reports on labor force, industries, occupations, employment projections, wages and other important labor market and economic data etc. are included in labour market information/situation of a country.

UNIT 4

PRICES AND WAGES STATISTICS

Data on transactions provide the basic source material from which the values of the various elements in the accounts are built up or derived. The use of transactions data has important advantages. The first of these is that the prices at which goods and services are exchanged in transactions between buyers and sellers on markets provide the information needed for valuing, directly or indirectly, all the items in the accounts. Secondly, a transaction that takes place between two different institutional units has to be recorded for both parties to the transaction and therefore generally appears twice in a system of macroeconomic accounts.

In a market economy, the prices used to value different goods and services should reflect not only their relative costs of production but also the relative benefits or utilities to be derived from using them for production or consumption. This establishes the link between changes in aggregate production and consumption and changes in welfare. In SNA, three type of prices are used for valuation – basic price, producer's price, and purchaser's/market price.

The **basic price** is defined as the amount receivable by the producer from the purchaser for a unit of good or service produced as output minus any tax payable and plus any subsidy receivable on the product as a consequence of its production or sale. It excludes any transport charges invoiced separately by the producer.

The **producer's price** is defined as the amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any value added tax (VAT), or similar deductible tax, invoiced to the purchaser. It also excludes any transport charges invoiced separately by the producer.

The **purchaser's price** is defined as the amount payable by the purchaser, excluding any deductible VAT or similar deductible tax, in order to take delivery of a unit of a good or service at the time and place required by the purchaser. The purchaser's price of a good includes any transport charges paid separately by the purchaser to take delivery at the required time and place.

4.1. Price Indices

There are four major types of price index available to derive volume measures in the national accounts: producer price indices (PPIs), consumer price indices (CPIs), export price indices (XPIs) and import price indices (MPIs). PPIs are measures of basic prices and CPIs are measures of purchasers' prices. XPIs are measures of FOB prices; MPIs may measure FOB or CIF prices.

A producer price index (PPI) measures the rate of change in the prices of goods and services bought and sold by producers. It usually includes mining, manufacturing, public utilities, agriculture, forestry, and fishing but can extend to construction and services. It is a key statistic for economic and business decision making and inflation monitoring. An output PPI measures the rate of change in the prices of products sold as they leave the producer. An input PPI measures the rate of change in the prices of the inputs of goods and services purchased by the producer.

The main uses of the PPI are as (1) a short-term indicator of inflationary trends; (2) indexation in legal contracts in both the public and private sectors, particularly for more detailed PPI components; (3) compilation of other inflation measures such as an export price index or the final expenditure price index; (4) an analytical tool for businesses and researchers; and (5) national accounts deflation.

The consumer price index (CPI) measures, usually as a monthly series, the overall rate of change in the prices of goods and services consumed by households. Analysts also widely use it as a proxy for a general index of inflation for the economy as a whole, partly because of the frequency and timeliness with which it is produced. It has become a key statistic for the purpose of economic policymaking, especially monetary policy. It is often specified in legislation and in a wide variety of contracts as the appropriate measure of inflation for the purpose of adjusting payments (such as wages, rents, interest, and social security benefits) for the effects of inflation. It can therefore have substantial and wide-ranging financial implications for governments and businesses, as well as for households. Another use is for national accounts deflation.

The prices used to compile the CPI are of selected representative items of different product groups, monitored each month from a representative sample of shops or other retail outlets. The usual method of calculation is to measure the average period-to-period price changes for each selected item and then weight these item price changes by the relative amounts that households spend on them. It is not unusual for agencies to monitor more than 100,000 price quotes each

month. CPIs are official statistics usually produced by national statistical offices, ministries of labor, or central banks. They are published as quickly as possible, typically about 10–15 days after the end of the most recent month or quarter.

Export and import price indices (XMPs) for a country measure the rate of change over time in the prices of traded goods and services. A country's export price index measures the rate of change in the prices of goods and services sold to foreign buyers by residents of that country. A country's import price index measures the rate of change in the prices of goods and services purchased from abroad by residents of that country.

The XMPs, foreign trade indices, as measures of both price and volume changes, have many uses. The most important of these are their use in government economic policy, analysis of competitiveness, conclusion of trade contracts, measurement and forecasting of inflation, analysis of exchange rate, and compilation of national accounts.

4.2. Wage Indices

Wages and salaries include the values of any social contributions, income taxes, etc., payable by the employee even if they are actually withheld by the employer for administrative convenience or other reasons and paid directly to social insurance schemes, tax authorities, etc., on behalf of the employee. Wages and salaries may be paid in various ways, including goods or services provided to employees as remuneration in kind instead of, or in addition to, remuneration in cash.

Wages and salaries in cash include the following kinds of remuneration:

- a. Wages or salaries payable at regular weekly, monthly or other intervals, including payments by results and piecework payments; enhanced payments or special allowances for working overtime, at nights, at weekends or other unsocial hours; allowances for working away from home or in disagreeable or hazardous circumstances; expatriation allowances for working abroad; etc.;
- b. Supplementary allowances payable regularly, such as housing allowances or allowances to cover the costs of travel to and from work, but excluding social benefits;
- c. Wages or salaries payable to employees away from work for short periods, for example, on holiday or as a result of a temporary halt to production, except during absences due to sickness, injury, etc.;

- d. Ad hoc bonuses or other exceptional payments linked to the overall performance of the enterprise made under incentive schemes;
- e. Commissions, gratuities and tips received by employees: these should be treated as payments for services rendered by the enterprise employing the worker, and so should also be included in the output and gross value added of the employing enterprise when they are paid directly to the employee by a third party.

Wages and salaries in kind – Employers may remunerate their employees in kind for various reasons. For example:

- a. There may be tax advantages for the employer, the employee, or both by avoiding payments in cash;
- b. The employer may wish to dispose of outputs that are periodically in excess supply.

Wage/Salary index can be compiled by selected basket of occupations followed by International Standard Classification of Occupation (ISCO). This index can be used as a deflator for compilation of national accounts of service sectors e.g. Public admin and defence sector.

UNIT 5

INTERNATIONAL TRADE STATISTICS

International trade in goods and services is a major component of the globalisation process. It is a principal channel of economic integration and a driver for economic growth. Overall trade can represent very significant amounts, exceeding sometimes that of GDP. Trade in goods typically represents over two-thirds of total trade, but trade in services is catching up.

5.1. International Trade in Goods Statistics

According to United Nations guidelines, international merchandise trade statistics are customs-based and record all goods that add to, or subtract, from a country's stock of material resources by entering (imports) or leaving (exports) its economic territory. Goods simply being transported through a country, or goods temporarily admitted or withdrawn (except for goods for inward or outward processing), are not included in the international merchandise trade statistics. The complex nature of customs and statistical needs necessitate a very detailed commodity classification.

The Harmonized Commodity Description and Coding System (Harmonized System, or HS) provides such details. While this nomenclature is based on the nature of the commodity, the Standard International Trade Classification, Revision 3 (SITC, Rev.3), which classifies commodities according to their stage of production, is also used and is considered more suitable for economic analysis.

5.2. International Trade in Services Statistics

International trade in services is growing in importance around the world. Traditional services – transport and insurance on merchandise trade, as well as travel – account for about half of total international trade in services. But trade in newer types of services, particularly those that can be conducted via the Internet, is growing rapidly.

Services are the result of a production activity that changes the conditions of the consuming units, or facilitate the exchange of products or financial assets. These types of service may be described as transformation services and margin services respectively.

The 2008 SNA qualifies transformation services as follows: The changes that consumers of services engage the producers to bring about, can take a variety of different forms as follows:

- a. Changes in the condition of the consumer's goods: the producer works directly on goods owned by the consumer by transporting, cleaning, repairing or otherwise transforming them;
- b. Changes in the physical condition of persons: the producer transports the persons, provides them with accommodation, provides them with medical or surgical treatments, improves their appearance, etc.;
- c. Changes in the mental condition of persons: the producer provides education, information, advice, entertainment or similar services in a face to face manner.

The 2008 SNA defines margin services as follows: Margin services result when one institutional unit facilitates the change of ownership of goods, knowledge-capturing products, some services or financial assets between two other institutional units. Margin services are provided by wholesalers and retailers and by many types of financial institutions. Margin services resemble change-effecting services in that they are not separate entities over which ownership rights can be established. They cannot be traded separately from their production. By the time their production is completed they must have been provided to the consumers.

Before the publication of MSITS 2010, the conventional statistical meaning of international trade in services was that described in BPM6, which defines international trade in services as being trade between residents and non-residents of an economy. This also corresponds very closely to the concept of trade in services in the 'rest of the world' account of the 2008 SNA. Such trade is described in MSITS 2010. This concept of international trade in services combines with the concept of international trade in goods to form international trade in the BPM6 Goods and Services Account. But it is not always possible to clearly separate the value of trade in goods from the value of trade in services.

Services differ from goods in a number of ways, most commonly in the immediacy of the relationship between supplier and consumer. Many services are non-transportable, i.e. they often require the physical proximity of supplier and customer, for example, the provision of a hotel service requires that the hotel is where the customer wishes to stay, a cleaning service for a business must be provided at the site of the business, and a haircut requires that both hairstylist and client be present.

For international trade in such non-transportable services to take place, either the consumer must go to the supplier or the supplier must go to the consumer. Suppliers may also prefer providing their services by being present in the country of the consumer rather than cross-border. International trade agreements concerning services, in particular those embodied in GATS, make provision for agreement on suppliers having a presence in the country of the consumer or vice-versa.

The statistics on international trade in services (ITS) provide internationally comparable statistics to meet the needs of private and public sectors, including for globalization studies and trade negotiations and agreements. Countries collect ITS information through a coherent conceptual framework within which they can organize the statistics.

ITS statistics cover four modes through which services may be traded internationally: (1) cross-border supply – where suppliers of services in one country supply services to consumers in another country without either party moving into the territory of the other; (2) consumption abroad – where a consumer in one country moves to another country to obtain a service; (3) commercial presence – where enterprises in an economy supply services through the activities of their foreign affiliates abroad; and (4) presence of natural persons – where an individual moves to the country of the consumer to provide a service on his own or employer's behalf.

Therefore, MSITS 2010 extends the scope of international trade in services to cover the supply of services through foreign affiliates established abroad. Such supply of services and its related statistics, described here as Foreign Affiliates Statistics (FATS).

MSITS 2010 also covers the supply of services through the presence of foreign individuals, either as foreign service suppliers themselves or employed by a foreign service supplier, which is either the mother enterprise or a foreign affiliate of the mother enterprise. However, non-resident persons employed by host country enterprises that are not owned by a foreign parent are outside the scope of MSITS 2010. Most services supplied through the presence of natural persons are covered by the BPM6 (i.e. services account) and FATS frameworks.

UNIT 6

BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION

Like the balance of payments manuals issued by the IMF in 1948, 1950, 1961, 1977, and 1993, the sixth edition of the Balance of Payments Manual (BPM6; IMF, 2009) serves as the international standard for the conceptual framework underlying balance of payments and international investment position (IIP) statistics. This framework assists countries in systematically collecting, organizing, and comparing these statistics across countries. In drafting the BPM6, the authors took great care to harmonize it with the 1993/2008 SNA. In particular, as was done for the national accounts, they extended the balance of payments framework to encompass transactions, other economic flows, and stocks of external financial assets and liabilities (the IIP).

6.1. Balance of Payments (BOP)

Structured similarly to the national accounts, the balance of payments covers all economic events with nonresidents. This section illustrates the three types of balance of payments accounts: the current account, recording transactions with nonresidents in goods and services, income, and current transfers; capital account, recording transactions in capital transfers and nonproduced nonfinancial assets; and financial account, recording transactions in external financial assets and liabilities.

Current Account

The current account's standard components are goods and services, income, and current transfers. The current account is also closely related to the national accounts (IMF, 2007).

Goods and services

In the goods and services account, goods cover principally exports and imports – as shown in external trade statistics – adjusted for timing, valuation, and coverage in accordance with the change of ownership requirements of the system. Goods include general merchandise, goods for processing, repairs on goods, goods procured in ports by carriers, and nonmonetary gold. The

goods accounts value both exports and imports of goods free on board (f.o.b.) from the country of export, providing for symmetrical valuation.

For services, the transportation and insurance service items in the accounts record the costs of shipping the goods between the exporting country and importing country, performed by residents for nonresidents, and vice versa. Other services cover a range of activities, including transportation of passengers, travel, communication, construction, and so forth.

Income

The second component of the current account, income, creates a separate category, as in the national accounts, for transactions in primary incomes. These transactions comprise compensation of employees (labor income) and investment income – the latter identifying separately direct investment income, portfolio investment, and other investment.

Current transfers

The third component, current transfers, identifies separately, as in the national accounts, the transfers involving the resident general government sector and those involving other resident sectors. In the latter, workers' remittances make up a major component. The current account balance in particular mirrors the saving and investment behavior of the domestic economy in the national accounts.

Capital Account

Similar to the capital account of the national accounts, the balance of payments capital account records transactions in capital transfers and nonproduced, nonfinancial assets. Moreover, when recorders draw a balance to take account of the balance of payments current account and capital account transactions, then that balance equals net lending/borrowing with the rest of the world (IMF, 2007).

Financial Account

The financial account records all transactions in financial assets and liabilities between residents and nonresidents. It records, therefore, the form in which the net lending/borrowing with the rest of the world takes place (IMF, 2007).

Although the scope of the transactions covered in the financial account is the same as in the national accounts, the classification differs. The financial account transactions are classified using criteria as follows:

1. By function (that is, distinguishing the purpose of the investment). The functional categories are direct investment, portfolio investment, financial derivatives, other investment, and reserve assets:
 - a. Direct investment is characterized by the investor's having an effective voice in the management of an enterprise, identified using a 10 percent equity ownership rule.
 - b. Portfolio investment refers to investment in debt and equity securities (both usually traded) other than those included in direct investment and reserve assets.
 - c. Financial derivative instruments are linked to a specific financial instrument, through which specific risks can be traded in their own right in financial markets. They include options, futures contracts, and swaps.
 - d. Other investment comprises instruments not covered by the other categories, including trade credits, loans, currency and deposits, and other assets/liabilities.
 - e. Reserve assets consist of external assets readily available to and controlled by the monetary authorities for addressing payments imbalances. The category comprises monetary gold, SDRs, reserve position in the IMF, foreign exchange assets (consisting of currency and deposits, securities, and financial derivatives), and other claims.
2. By whether the instrument is an asset or liability.
3. By the nature of the instrument involved – equity, debt, trade credit, loans, currency and deposits, and so forth.
4. By the domestic sector (in the case of portfolio investment and other investment) acquiring the assets or incurring the liabilities. The sectors are monetary authorities, general government, banks, and other sectors.
5. Further by long- or short-term investment (in the case of other investment and the debt securities component of portfolio investment) according to the original maturity of the instrument.

Surplus or Deficit

In public debate, the expressions surplus or deficit in the balance of payments are frequently used. They are often left undefined and may have different meanings in different countries. Broadly, a surplus refers to a positive balance for a set of transactions (that is, when the sum of

the credit entries exceeds the sum of the debit entries), whereas a deficit refers to a negative balance of the set of transactions (that is, when the sum of the debit entries exceeds the sum of the credit entries).

6.2. International Investment Position (IIP)

The IIP is the balance sheet of financial assets and liabilities for an economy with respect to the rest of the world. It provides information on the stock of those financial assets and liabilities at the beginning and end of the period; it also describes the changes in those stocks in terms of transactions, revaluations, and other economic flows. Revaluations separately identify price changes for the asset/liability from exchange rate changes. The net IIP – external financial assets minus external liabilities – shows the difference between what an economy owns in other economies in relation to what it owes. The net IIP, combined with the stock of an economy's nonfinancial assets, constitutes the net worth of that economy (IMF, 2007).

The IIP is classified in the same way as the financial account of the balance of payments. Also, the key concepts guiding the compilation of IIP statistics – residence, valuation, and time of recording – are the same as for the balance of payments and national accounts. The items constituting financial assets and liabilities are financial claims on and liabilities to nonresidents, equity assets and liabilities, financial derivative instruments, monetary gold, and SDRs. The financial instruments making up the assets and liabilities could be grouped according to the functional type of investment – direct investment, portfolio investment, financial derivatives, other investment, and reserve assets.

The IIP provides a picture of the portfolio of external assets and liabilities for an economy at a point in time: this portfolio is normally the result of past external transactions measured according to current market values (current market prices and exchange rates) and other factors (such as writeoffs or reclassifications).

A country can use an IIP to analyze the appropriateness of its external asset portfolio against its debt profile. It can also use a set of IIPs for a number of periods to assess developments in the portfolio over time. Indeed, the IIP provides a meaningful basis for countries to analyze rates of return of their external investments. Often, they can use net IIP of an economy to analyze developments and trends in the performance of an economy with the rest of the world. The IIP differs from measures of gross external debt by including information on financial assets and nondebt liabilities (such as equity and financial derivatives).

6.3. External Debt Statistics

For measuring and presenting external debt statistics, the External Debt Statistics: Guide for Compilers and Users, published by the IMF in 2003, aims to comprehensively guide users, advising on compiling and analyzing the data. The IMF and other international organizations developed the Guide in response to concerns of markets and policymakers to have better data to help assess external vulnerabilities at a time when increasing international capital flows are resulting in greater market interdependence (IMF, 2007).

A previous guide on external debt, published in 1988, used a measure of debt commonly known as disbursed and outstanding debt valued in nominal terms. Largely, this measure reflected the traditional focus on borrowing from banks and government sources, often by the public sector.

For many countries, the growth in the 1990s in cross-border private capital flows led to a need for a broader focus. The Guide introduced a comprehensive framework based on the 1993 SNA for measuring the gross external debt position. Under this framework, gross external debt includes all liabilities (other than equity and financial derivatives) owed to nonresidents. The framework is consistent with the balance of payments and IIP.

The priority that individual countries give to compiling data series going beyond gross external debt, presented in the Guide, will vary depending on circumstances. However, the Guide strongly recommends that countries compile data on the debt-service schedule (the timing and magnitude of future payments) and currency composition of external debt (an indicator of exposure to exchange rate movement). These data reveal essential information on the external vulnerabilities facing an economy.

Similarly, the Guide advises on how to measure the net external debt position – gross external debt less external assets in the form of debt instruments. For economies whose private sector is active in financial markets, the net external debt concept, like the net IIP, is particularly relevant in assessing the sustainability of the external position.

6.4. Direct Investment, Portfolio Investment, and International Reserves

Three other data sets complement balance of payments and IIP statistics by providing a more detailed view of activities encompassed within, or linked to, these frameworks. These data sets

are the data template on international reserves and foreign currency liquidity, the foreign direct investment statistics, and the coordinated portfolio investment survey.

Foreign Direct Investment

Direct investment, a category of international investment, reflects the objective of a resident entity in one economy obtaining a lasting interest in an enterprise resident in another economy. The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence by the investor over the management of the enterprise (IMF, 2007).

Growing international linkages through direct investment are an important feature of globalization. The integration of capital markets and the consequent rapid growth in direct investment have brought increased scrutiny of the activities of multinational enterprises. In scrutinizing these activities, analysts widely use two sets of statistics:

- Direct investment statistics, which measure cross-border positions and flows between entities in direct investment relationships; and
- Statistics that measure the operations of foreign affiliates of multinational enterprises – such as sales, employment, and assets – and thus provide a measure of the impact of the direct investment on the economy. These statistics are often referred to as foreign affiliates trade statistics.

The direct investment statistics form components of the balance of payments and IIP. They provide data for balance of payments forecasting, economic surveillance, and vulnerability analysis. To facilitate analysis, countries often extend direct investment statistics to provide geographical information on transactions and positions by partner country and region and to provide breakdowns by industrial sector.

Portfolio Investment

The coordinated portfolio investment survey (CPIS) is an international survey of the holdings of portfolio investment assets. The survey provides data on holdings of equity and debt securities (both short- and long-term) from the perspective of security holders. It brings together data on the type of issue, country of residence of issue, and country of holder. It also contains some information on the sector of holder and currency of issue (IMF, 2007).

Countries also collect a similar breakdown of securities in the reserve assets of many of the major economies holding reserve assets, and securities of international organizations, but these data are published in aggregate from the asset side.

Because countries provide the data on a bilateral basis, the survey provides information about the counterparty security liabilities of debtor countries, which could use this information to estimate their own outstanding liabilities. It also helps other users understand the magnitude of cross-border exposure of countries. The CPIS complements the IIP data by providing a more detailed view of portfolio investment activity.

International Reserves

The data template on international reserves and foreign currency liquidity is designed to integrate the concepts of international reserves and foreign currency liquidity within a single framework. It covers not only the authorities' foreign currency resources on a given date but also inflows and outflows of foreign exchange over a future one-year period. This provides a broader framework for assessing countries' foreign currency liquidity, considered necessary at a time of increasing complexity and importance of such information (IMF, 2007).

The template provides a comprehensive account of country authorities' foreign currency assets and the drains on such resources resulting from various foreign currency liabilities and commitments of the authorities. It reports the amount and composition of official reserves and other foreign currency assets by the monetary authorities and the central government. It also reports foreign currency obligations of the monetary authorities and central government coming due in the short term, including those related to their financial derivative positions and guarantees extended for quasi-official and private sector borrowing.

UNIT 7

MONETARY AND FINANCIAL STATISTICS

Monetary and financial statistics consist of a comprehensive set of stock and flow data on the financial and nonfinancial assets and liabilities of an economy's financial corporations sector. The financial corporations sector plays an important role in matching units that have net lending surpluses with those that have borrowing requirements. Different types of financial corporations play specific roles, and a wide array of financial instruments exists to meet the complex needs of units active in financial markets. To show financial flows among the units and sectors of an economy and corresponding financial asset and liability positions, specialists have created statistical formats to organize and present the monetary and financial statistics (IMF, 2007).

Primarily, monetary and financial statistics provide important information on money measures, credit to various sectors, and foreign financial assets and liabilities; in addition, they provide valuable links to government finance and balance of payments statistics. They are often available on a more timely and frequent basis than other sets of macroeconomic data. Even countries that follow inflation targeting and do not establish money or credit growth targets may find monetary and financial statistics useful for information on intersectoral financial relationships and links with the rest of the world. Monetary and financial data are important for formulating and implementing monetary policy and broader types of macroeconomic policy.

7.1. Coverage of Monetary and Financial Statistics

Addressing the coverage of monetary and financial statistics, the MFSM identifies three types of financial corporations: the central bank, other depository corporations, and other financial corporations. The central bank and other depository corporations (together, depository corporations) are the institutional focus of monetary statistics; other financial corporations include insurance corporations and pension funds, other financial intermediaries, and financial auxiliaries (IMF, 2007).

The **central bank** is the national financial institution exercising control over key aspects of the financial system. Its activities include issuing currency, managing international reserves, transacting with the IMF, and providing credit to other depository corporations.

Other depository corporations are all resident units engaging primarily in financial intermediation and issuing liabilities included in the national definition of broad money. A measure of money in a given country will depend on the financial instruments available, the financial institutions, and the structure and behavior of financial markets. Thus, it is not possible to specify a precise definition of money applying to all countries. For this reason, it is also not possible to define other depository corporations by the names of institutions. Typically included in depository corporations are all units accepting deposits (demand, time, savings), such as commercial banks, savings banks, building societies, and so forth. However, a unit funded exclusively through the issuance of securities would be classified as a depository corporation if those securities were included in the national definition of broad money in a particular country.

Other financial corporations include insurance corporations and pension funds, other financial intermediaries, and financial auxiliaries. Financial auxiliaries provide services to financial intermediaries and financial markets but do not incur liabilities for the purpose of financial intermediation. For example, security brokers act as agents between buyers and sellers of securities but do not take title to the securities. Other examples of financial auxiliaries are securities exchanges, foreign exchange companies, and units specializing in guarantees.

Among other financial corporations, insurance corporations include those units providing life, accident, health, fire, and other types of insurance to individual units or groups of units. Pension funds are units established to provide retirement benefits for specific groups of employees. Classified as part of general government are social security schemes funded through taxes and controlled by government units that provide retirement and other benefits to members of the community as a whole. Other financial intermediaries cover a very broad range of units that incur liabilities to acquire financial assets but whose liabilities are not included in broad money. These other financial intermediaries may provide credit to other units similar to the credit provided by depository corporations; thus, the classification must be based on the nature of the liabilities.

7.2. Financial Assets and Liabilities

Financial assets are a subset of economic assets – entities over which institutional units enforce ownership rights, individually or collectively, and from which they can derive economic benefits by holding or using the assets over a period. Most financial assets originate from financial claims arising from contractual relationships entered into when one institutional unit provides

funds to another. Financial assets are therefore financial claims having demonstrable value (IMF, 2007).

Such contracts, through which asset holders acquire unconditional claims on other institutional units, create creditor/debtor (asset and liability) relationships with regard to a financial instrument. Exceptions are monetary gold and SDRs – they are financial assets by convention for which there are no corresponding liabilities.

Using the 1993 SNA classification scheme, the MFSM classifies financial assets based on two broad criteria: the liquidity of the asset and the legal characteristic underlying the creditor/debtor relationship. The liquidity concept encompasses other more specific characteristics, such as negotiability, transferability, marketability, and convertibility.

Other financial assets within the framework of monetary and financial statistics and as defined in the introduction are currency and deposits, securities other than shares, loans, shares and other equity, insurance technical reserves, financial derivatives, and other accounts receivable/payable.

7.3. Monetary Aggregates and Depository Corporations

The MFSM does not recommend a specific measure or measures of money but rather describes the issues that a country should take into account in deriving money measures. The MFSM focuses on a country's developing **broad money** measures. **Narrow money** measures include instruments used directly for making transactions, whereas broad money aggregates include instruments that serve a range of purposes, including making transactions, serving as a store of value, providing income in the form of interest, and so forth. Few countries focus solely on narrow money measures, primarily because other instruments may be substituted quite easily for the transaction instruments (IMF, 2007).

In defining money measures, countries specify three dimensions: which instruments to include, who to include as money holders, and which institutions to include as money issuers. First, the **instruments** countries may include in money measures are currency, deposits, and securities other than shares. Countries always include national currency and transferable deposits in money measures, and most countries also include other deposits, unless these deposits are so highly restricted that they do not serve the purposes of money. Some countries include securities other than shares in money measures, when the securities are close substitutes for deposits.

Second, in defining a measure of money, countries also must specify who to include as **holders** of monetary instruments. Most countries define money holders to include all resident sectors except depository corporations and central government. Thus, money holders are state and local governments, nonfinancial corporations, financial corporations other than depository corporations, households, and nonprofit institutions serving households (NPISH).

Third, **money issuers** include all financial corporations having as liabilities the financial instruments considered to have monetary characteristics. This group of institutions will include the central bank (generally the issuer of currency), commercial and other banks that accept transferable deposits, units that accept other types of deposits (savings banks, building societies, and so forth), and units that issue short-term securities considered by holders to be close substitutes for deposits. It is not possible to identify a money issuer by the name of the institution. For example, “finance companies” accept deposits in some countries, while in others, controlling institutions fund finance companies directly. By definition, **depository corporations** include all financial corporations that issue liabilities included in the national definition of broad money.

7.4. Depository Corporations Survey

When assessing monetary statistics, analysts use mainly the DCS, which presents depository corporations’ broad money liabilities. This section outlines how countries prepare and use a DCS – collecting the monetary and financial statistics, compiling the statistics in balance sheets, and making analytical presentations in monetary surveys, specifically the DCS (IMF, 2007).

For collecting monetary and financial statistics, the MFSM recommends countries collect the data in a way that identifies the types of financial instruments in the data and, for each instrument, the positions with main sectors and subsectors of the economy. That is, they need to identify which units the financial corporations have claims on and which units have claims on the financial corporations.

For compiling the data from the reporting institutions, the MFSM recommends countries use sectoral balance sheets. Sectoral balance sheets organize data by categories of assets and liabilities, by resident and nonresident categories, and by appropriate breakdown of the resident sectors – thereby allowing staff to directly prepare presentations for policy and analytical purposes.

The main analytical presentations recommended by the MFSM are monetary surveys – consolidated sectoral balance sheets for one or more subsectors of the financial corporations sector. Surveys cover specific subsectors like the central bank, other depository corporations, and other financial corporations. Surveys also consolidate subsectors. Thus, a DCS consolidates the surveys for the central bank and other depository corporations.

The main survey that analysts use to assess monetary statistics is the DCS, which relates depository corporations' broad money liabilities to their foreign assets and liabilities, their net claims on central government, and their claims on other resident sectors. Hence, the DCS links the monetary statistics to the balance of payments and government finance statistics (GFS), respectively, as well as to other sectors.

7.5. Financial Corporations Survey

The FCS serves to analyze financial positions for the complete financial sector. This survey is particularly useful in analyzing the credit provided by all financial intermediaries. The relevance of the FCS has increased as activities by other financial corporations have expanded, in particular by insurance corporations and pension funds. These institutions can manage financial assets and have financial liabilities constituting a significant proportion of the financial assets and liabilities of the other depository corporations sector (IMF, 2007).

In the same way that countries construct a DCS, they can construct an FCS, which analytically presents the financial corporations sector's claims on, and liabilities to, all other domestic sectors and nonresidents. Unlike the DCS, the FCS is not structured around the concept of broad money. Moreover, in the liability section, the FCS presents as a separate item insurance technical reserves, to highlight the importance of these liabilities within the total liabilities.

7.6. Flow of Funds Statistics

In many countries, the development of financial markets has reduced the relative importance of financial intermediaries in providing credit and other financial services. For example, corporations that traditionally borrowed from banks may now meet their financing needs by issuing securities on the financial market and obtaining their financing from a mix of domestic and foreign lenders. If analyzing these developments is considered important, a country may develop a broader basis for financial analysis called ***financial accounts or flow of funds***. A flow of funds measures all the important financial relationships in an economy and between an

economy and the rest of the world. The MFSM provides guidance in establishing flow of funds accounts, drawing from the 1993 SNA (IMF, 2007).

The more detailed presentation of financial transactions by instrument and counterparty sector is known as detailed flow of funds accounting. This presentation cross-classifies financial assets acquired by each sector by instrument and the counterpart debtor sector. It also cross-classifies liabilities incurred by each sector by instrument and counterpart creditor sector. The level of sectoral detail presented depends on the needs of the country concerned. However, typically a detailed flow of funds presents data for each sector of the economy – with the financial corporations sector broken into subsectors (central bank, other depository corporations, other financial corporations, financial auxiliaries, and insurance corporations and pension funds) – allowing analysts to better assess the financial flows. The presentation also gives data for the rest of the world, as if it were an institutional sector. The interlocking row and column constraints within the matrix are an important check on the consistency of the data compilation, considerably increasing the data's usefulness for analysts.

Countries may also complement the detailed flow of funds statistics with data on the stocks of financial assets and liabilities cross-classified by sector and instrument. As described in the MFSM, the entire set of stock and flow data, including not only the transactions (flow of funds) but also other flows, are referred to as financial statistics.

UNIT 8

FISCAL AND MONETARY POLICY

Fiscal policy can be distinguished from monetary policy, in that fiscal policy deals with taxation and government spending and is often administered by an executive under laws of a legislature, whereas monetary policy deals with the money supply, lending rates and interest rates and is often administered by a central bank.

8.1. Fiscal Policy and Fiscal Management

Fiscal policy is the use of government revenue collection (mainly taxes) and expenditure (spending) to influence the economy. The two main instruments of fiscal policy are changes in the level and composition of taxation and government spending in various sectors. These changes can affect the following macroeconomic variables, amongst others, in an economy:

- Aggregate demand and the level of economic activity;
- Savings and Investment in the economy
- The distribution of income

Fiscal policy can be used to stabilize the economy over the course of the business cycle. The main stances of fiscal policy are:

1. **Neutral fiscal policy** is usually undertaken when an economy is in equilibrium. Government spending is fully funded by tax revenue and overall the budget outcome has a neutral effect on the level of economic activity.
2. **Expansionary fiscal policy** involves government spending exceeding tax revenue, and is usually undertaken during recessions. It is also known as reflationary fiscal policy.
3. **Contractionary fiscal policy** occurs when government spending is lower than tax revenue, and is usually undertaken to pay down government debt.

Governments use fiscal policy to influence the level of aggregate demand in the economy, in an effort to achieve economic objectives of price stability, full employment, and economic growth. Governments spend money on a wide variety of things, from the military and police to services like education and healthcare, as well as transfer payments such as welfare benefits. This expenditure can be funded in a number of different ways – Taxation; Seigniorage, the benefit

from printing money; Borrowing money from the population or from abroad; Consumption of fiscal reserves; Sale of fixed assets (e.g., land).

A **fiscal deficit** is often funded by issuing bonds, like treasury bills or consols and gilt-edged securities. These pay interest, either for a fixed period or indefinitely. If the interest and capital requirements are too large, a nation may default on its debts, usually to foreign creditors. Public debt or borrowing refers to the government borrowing from the public.

A **fiscal surplus** is often saved for future use, and may be invested in either local currency or any financial instrument that may be traded later once resources are needed; notice, additional debt is not needed. For this to happen, the marginal propensity to save needs to be strictly positive.

8.2. Monetary Policy and Monetary Management

Monetary policy is the process by which the monetary authority of a country controls the supply of money, often targeting an inflation rate or interest rate to ensure price stability and general trust in the currency. Further goals of a monetary policy are usually to contribute to economic growth and stability, to lower unemployment, and to maintain predictable exchange rates with other currencies. Monetary policy, to a great extent, is the management of expectations. Monetary policy rests on the relationship between the rates of interest in an economy, that is, the price at which money can be borrowed, and the total supply of money.

Monetary policy is referred to as either being expansionary or contractionary, where an **expansionary** policy increases the total supply of money in the economy more rapidly than usual, and **contractionary** policy expands the money supply more slowly than usual or even shrinks it. Expansionary policy is traditionally used to try to combat unemployment in a recession by lowering interest rates in the hope that easy credit will entice businesses into expanding. Contractionary policy is intended to slow inflation in order to avoid the resulting distortions and deterioration of asset values.

Furthermore, monetary policies are described as follows: **accommodative**, if the interest rate set by the central monetary authority is intended to create economic growth; **neutral**, if it is intended neither to create growth nor combat inflation; or **tight** if intended to reduce inflation.

UNIT 9

GOVERNMENT FINANCE STATISTICS

Economists and statisticians have long found it useful to separate the activities of government from those of the rest of the economy because the powers, motivation, and functions of government differ from those of other sectors. Governments have powers to raise taxes and other compulsory levies and to pass laws affecting the behavior of other economic units. They focus on public policy considerations rather than on profit maximization (IMF, 2007). The principal economic functions of general government are

- To provide goods and services to the community on a nonmarket basis, either for collective consumption (such as public administration, defense, and law enforcement) or individual consumption (education, health, housing, and cultural services); and
- To redistribute income and wealth by means of transfer payments (taxes and social benefits).

When considering general government statistics, economists also look at the broader public sector, because governments often fulfill their public policy objectives through operating public enterprises (for example, railways, airlines, public utilities, and public financial corporations). A government may do so by requiring a corporation to service areas of the economy that would not be otherwise covered and by charging subsidized prices, including lending at low interest rates. As a result, the public corporation operates with a reduced profit or at a loss. Such public policy operations are known as quasi-fiscal activity. For compiling and analyzing general government and public sector statistics, the Government Finance Statistics Manual (GFSM) provides a comprehensive framework.

9.1. Coverage of General Government

As with the other macroeconomic statistics, the coverage of the general government sector is based on classifying resident institutional units. The first criterion for national data compilers to use for sectorizing government units is “control” – if the government controls the unit, compilers classify it as within the public sector; otherwise it is a private sector unit (IMF, 2007).

Next, compilers classify the public sector units into the general government sector or the public corporations sector, on the basis of how the units’ output is financed. If the unit primarily sells

goods and services at economically significant prices, it is a market producer, and it is classified as a (financial or nonfinancial) public corporation. If the unit does not sell most of its output at economically significant prices, it is a nonmarket producer of goods and services, and it should be classified as part of the general government sector.

Fundamentally, the general government sector covers all institutional units at the central government, state government, and local government levels. It also covers administrative units (budgetary and extrabudgetary), social security funds, and nonmarket nonprofit institutions controlled and mainly financed by government. Therefore, included in the general government sector are such institutional units as extrabudgetary funds, nonprofit institutions controlled by government, and public entities that, although legally having corporation status, do not sell their output at economically significant prices.

9.2. Basis of Recording

The new version of GFSM extends the cash-based analytical framework by emphasizing the recording of data on an accrual basis. That is, it recommends that government accountants record an economic event when economic value is created, transformed, exchanged, transferred, or extinguished – not just when the cash flow takes place. This gives a comprehensive picture of government activity, by allowing for the recording of noncash transactions (such as barter or in-kind transfers), internal transactions, other economic flows, the accrual of interest on discounted securities, and any payment arrears (IMF, 2007).

Warranting special mention is the recording of tax revenue on an accrual basis. The GFSM 2001 requires accountants to record as revenue only those taxes that countries can reasonably expect to collect. Over time, a close relationship should develop between the accrual recording of tax revenue and the cash received.

9.3. Analytical Framework

For its analytical framework, the GFSM 2001 supports the balance sheet approach (BSA) to analyzing economic policy – bringing together stocks and flows in a transparent and consistent framework. By presenting fiscal data in an integrated framework, it enables analysts to assess fiscal sustainability – that is, to evaluate how net worth evolves through a series of balance sheets. Moreover, the GFSM 2001 framework yields of government saving, investment, and consumption are largely harmonized with the national accounts framework (IMF, 2007).

The GFSM 2001 framework is composed of summary tables – similar to business financial accounting reports – comprising an operating statement, a balance sheet, and a cash statement. The framework consists of four analytic statements: the statement of government operations, the statement of other economic flows, the balance sheet, and the statement of sources and uses of cash. Within the tables are the four main balances of the system – four core fiscal indicators – the net operating balance, net lending/borrowing, and net worth, plus the cash surplus/deficit.

In addition to identifying the main balances of the system, the GFSM 2001 identifies other analytic measures of potential interest to analysts. These include the overall primary balance – adding back the interest expense to the overall fiscal balance to give a measure of the outcome from government’s discretionary activities – and the gross debt position – measuring the stock of all debt liabilities, as defined in the GFSM 2001.

Of the four analytic statements of the GFSM 2001 framework, three are based on accrual data for transactions, other economic flows, and balance sheets, while the fourth is cash-based, as follows:

The **statement of government operations** summarizes all transactions by general government units and derives the important analytic balances of net operating balance and net lending/borrowing (NL/B) from the following information.

The **net operating balance** summarizes the change in net worth owing to government transactions and is ultimately a measure of the sustainability of government policies affecting revenue and expense. It is conceptually equivalent to the national accounting concept of savings plus capital transfers. If the balance is positive, it indicates the government has generated surplus revenue from its current operations, resulting in an increase in its net worth. The government may use this surplus revenue to acquire assets and/or decrease liabilities. If the balance is negative, it indicates that government current operations have fallen short, necessitating the incurrence of liabilities or liquidation of assets to finance the shortfall.

Subtracting the net acquisition of nonfinancial assets from the net operating balance gives a second balance, **net lending/borrowing (NL/B)**. NL(+)/B(–) is a summary measure indicating, in essence, the extent to which government is either putting financial resources at the disposal of other sectors in the economy or using the financial resources generated by other sectors. In other

words, it may be said that the **net operating balance** focuses on the “activity” side (by considering transactions in revenue and expense), whereas **NL/B** focuses on the “financing” side (by considering transactions in financial assets and liabilities).

The **statement of other economic flows** presents information on changes in net worth arising from economic flows other than transactions. Economists classify these flows as either changes in prices (revaluations) or changes in the volume of assets and liabilities.

The **balance sheet** represents the stocks of assets, liabilities, and **net worth** at the beginning and the end of the accounting period. The **statement of sources and uses of cash** shows purely cash flows associated with revenue and expense transactions and transactions in nonfinancial assets, which yields the cash **surplus/deficit**. Adding cash flow transactions in financial assets (other than cash) and liabilities to the cash surplus/deficit gives net change in the stock of cash.

9.4. Major GFSM Classifications

This section outlines the three major classifications of the GFSM 2001: (1) economic, identifying the types of outlays governments incur; (2) functional, identifying the purpose for which governments undertake the outlays; and (3) counterparty, identifying the counterparty sectors.

Economic Classification

The statement of government operations presents government activity using what is known as an “economic” classification. The statement presents information based on the type of revenue, expense, nonfinancial asset, and financial instrument. The balance sheets and statement of other economic flows also use the economic classification of nonfinancial assets and use the type of instrument to classify financial assets and liabilities.

Functional Classification

The economic classification informs users on the type of outlay incurred by the government, but many users are also interested in the purpose for which the outlay was undertaken. The GFSM 2001 framework satisfies this interest by applying a functional classification. The GFSM 2001 framework applies the Classification of the Functions of Government (COFOG) to both expenses and the net acquisition of nonfinancial assets. COFOG classifies in detail the functions, or socioeconomic objectives, that general government units aim to achieve through kinds of

outlays. COFOG permits analysts to examine over time the trends in government outlays on functions or purposes, regardless of the organizational structure of the government.

Counterparty Classification

The GFSM 2001 also presents stocks of financial assets and liabilities and transactions in financial instruments by counterparty sector. This is to satisfy the interest of users in the sectors in which the government has outstanding claims/obligations and with which it is engaged in financial transactions. The economic classification classifies stock positions and transactions in financial assets and liabilities by types of financial instruments.

Resident counterpart sectors are the central bank, other depository corporations, financial corporations not elsewhere classified, nonfinancial corporations, households, and nonprofit institutions serving households (NPISH). Nonresident sectors are general government, international organizations, financial corporations, and other nonresidents.

UNIT 10

MACROECONOMIC SITUATION

(COUNTRY CASE: BANGLADESH)

Bangladesh economy continues to maintain its growth momentum confronting the challenges emerging from the slow pace of global recovery and the destabilising factors prevalent in the domestic front during the first half of FY 2013-14. The economy has posted an average growth rate of 6.02 percent in the last five years. GDP growth is provisionally estimated at 6.12 percent in FY 2013-14, slightly up from 6.01 percent in FY 2012-13 (BBS, 2015). The growth is broad-based and well-supported by the three sectors of the economy: agriculture, industry and service. The per capita national income reached US\$ 1,190 in FY 2013-14, up by US\$ 136, from US\$1,054 a year earlier. Inflation gradually came down and on point-to-point basis, inflation in June 2014 slid down to 6.97 percent from 8.06 percent in June 2013. Effective coordination between fiscal and monetary policy helped to maintain the macroeconomic stability. Exports registered a growth rate of 11.69 percent and imports growth rebounded to 19.39 percent in FY 2013-14. Although the inflow of remittances declined 1.61 percent, but remittances inflow rebounded in the second half of FY 2013-14. Despite contraction of remittances inflow, the current account balance maintained surplus of US\$1,547 million. As on 30 June 2014, foreign exchange reserve stood at US\$21,508 million, which is sufficient for about 6 months of import coverage. Exchange rate broadly remained stable during FY 2013-14. It is expected that the initiatives taken by the Government on fiscal and monetary fronts will help attain the desired growth targets (BER, 2014).

10.1. Economic Growth

According to the new base year (2005-06) data released by BBS, GDP growth is provisionally estimated at 6.12 percent in FY 2013-14, slightly up from 6.01 percent in FY 2012-13. The growth is driven by higher growth in agriculture and service sectors coupled with moderate growth in industry sector. Broad agriculture sector grew by 3.35 percent in FY 2013-14, up by 0.89 percentage point from the previous fiscal year. Within the broad agriculture sector, all sectors and sub-sectors performed well. Favourable weather conditions and continued government support helped agriculture sector to grow. At constant prices, the contribution of broad agriculture sector is 16.33 percent of GDP in FY 2013-14 (BER, 2014).

However, the growth in industry sector moderated to 8.39 percent, from 9.64 percent in FY 2012-13. Manufacturing sector which accounts for 64.22 percent of industry sector and 19.45 percent of GDP, showed moderate growth compared to the growth rate of previous year. The growth in large and medium-scale manufacturing sector decelerated to 9.16 percent from 10.65 percent in FY 2012-13. Likewise, the growth rate of small-scale manufacturing decelerated to 6.60 percent from 8.81 percent in FY 2012-13. However, construction sector growth increased by 0.52 percentage point to 8.56 percent in FY 2013-14.

Overall service sector growth has been estimated at 5.83 percent, up by 0.32 percentage point from FY 2012-13. Among the broad service sector, all the sectors and sub-sectors performed well compared with previous fiscal year. The service sector share in GDP stood at 54.05 percent in FY 2013-14.

The per capita national income exceeded US\$ 1,000 mark in FY 2012-13. According to the provisional estimates of BBS, per capita national income reached US\$ 1,190 in FY 2013-14, which is US\$ 136 higher than the previous year. Likewise, per capita GDP crossed the US\$ 1,000 mark in FY 2013-14, and stood at US\$ 1,054, which was US\$ 955 a year earlier.

10.2. Savings and Investment

During FY 2013-14, domestic savings reached to 23.43 percent of GDP (provisional), up by 1.39 percentage point from previous year. During the same period, national savings stood at 30.54 percent of GDP, almost similar to previous fiscal year. Investment in FY 2013-14, reached to 28.69 percent of GDP, up by 0.3 percentage point in FY 2012-13. The public investment increased from 6.64 percent of GDP in FY 2012-13 to 7.30 percent of GDP in FY 2013-14. On the other hand, private investment decreased from 21.75 percent of GDP to 21.39 percent of GDP due to domestic unrest and weak imports during the first half of the fiscal year. It is expected that, continued programme interventions by the Government in infrastructure sector including power, would help create investment friendly environment and keep investment growing (BER, 2014).

10.3. Inflation

Year-on-year inflation increased to 7.35 percent in FY 2013-14 relative to 6.78 percent in FY 2012-13. The upward pressure in inflation is largely driven by food-inflation, due to supply disruptions during the first half of the fiscal year. Food inflation rose in FY 2013-14 to 8.56

percent from 5.22 percent in FY 2012-13, while non-food inflation declined from 9.17 percent to 5.55 percent during the same period. Although, the average inflation rose in FY 2013-14, but it gradually came down. On point-to-point basis, inflation in June 2014 slid down to 6.97 percent from 8.06 percent in June 2013. During the same month, food inflation declined from 8.26 percent to 8.00 percent, while non-food inflation declined from 7.76 percent to 5.45 percent. This is due to decline of crude oil prices and consumer goods particularly the prices of rice in international markets, satisfactory food production in domestic level, stable exchange rate and slowdown in credit (BER, 2014).

10.4. Fiscal Sector

Revenue Mobilisation

The revenue mobilisation performance was stable in FY 2013-14 with a moderate rise in revenues receipts. According to provisional estimates of Integrated Budget and Accounting System (iBAS), total revenue receipt in FY 2013-14 increased by 10.52 percent over the previous year outturn. Total revenue receipts as percent to GDP reached 10.48 percent (GDP base year: 2005-06), slightly down (0.2 percentage point) compared to the preceding year's revenue earnings (BER, 2014).

Tax revenues from NBR sources increased by 8.35 percent to Tk.1,11,961 crore in FY 2013-14 from Tk.1,03,332 crore in FY 2012-13. Among the NBR sources of revenue, customs duties increased by 3.92 percent, VAT and supplementary duties by 7.36 percent and taxes on income and profit by 11.52 percent. Tax revenues from Non-NBR sources increased by 11.87 percent amounting to Tk.4,610 crore in FY 2013-14 compared to 13.43 percent growth in FY2012-13. Non-tax revenues increased by 21.08 percent to Tk. 25,033crore from Tk.20,676 crore in FY 2012-13.

Government Expenditure

In FY 2013-14, the total expenditure rose by 11.44 percent over the previous year outturn. As percent of GDP, Government expenditure reached 14.35 percent, slightly down (0.16 percentage point) compared to the preceding year's expenditure. According to provisional estimate of iBAS, the total expenditure under non-development budget increased by 11.65 percent to Tk.1,10,948 crore in FY 2013-14 from Tk.99,375 crore in FY 2012-13. Moreover, Annual Development Programme (ADP) expenditure increased by 11.10 percent to Tk.54,968 crore in FY 2013-14, from Tk. 49,474 in FY 2012-13 (BER, 2014).

Budget Balance and Financing

As per provisional estimate, the budget deficit stood at 3.87 percent of GDP (excluding grants) in FY 2013-14, of which 3.17 percent was financed from domestic sources and the remaining 0.70 percent from external sources (BER, 2014).

10.5. Monetary and Financial Sector

Monetary Policy and Monetary Management

The monetary policy statement (MPS) for the first half of FY 2013-14 was based on certain policy directions to bring average inflation down to 7 percent (using the 1995-96 base), while ensuring sufficient credit growth to stimulate the economy. The MPS aimed to contain reserve money growth to 15.5 percent, broad money growth to 17.2 percent and private sector credit growth 15.5 percent as programme targets by December 2013. The reserve money growth (13.30%) remained within the target, despite a surge in Net Foreign Assets (NFA) arising from robust exports and sluggish imports growth. Broad money growth of 15.56 percent in December 2013 was close to the programme target. However, private sector credit growth (10.50%) did not use up all the space provided in the monetary programme (BER, 2014).

In MPS for the second half of FY 2013-14, Bangladesh Bank kept the policy rates unchanged due to the risks of inflationary pressure. The MPS also aimed to contain reserve money growth to 16.2 percent, broad money growth to 17.0 percent and the private sector credit growth to 16.5 percent. However, the increased liquidity in the banking system due to significant surge in Net Foreign Assets needed to be sterilised through reverse repo operation.

In this backdrop, it was decided that banks should maintain CRR (Cash Reserve Requirement) separately from SLR (Statutory Liquidity Ratio) from February 01, 2014 in line with the Bank Companies (Amended) Act, 2013 with a view to implementing the monetary policy effectively. The required SLR is 13.00 percent daily for conventional banks and 5.50 percent daily for Islamic Shariah-based banks of their total demand and time liabilities. Hence, in light of persisting inflationary pressures, Bangladesh Bank raised the CRR by 50 basis points to 6.50 percent from June 24, 2014.

Money and Credit Situation

During FY 2013-14, the year-on-year growth of narrow money (M1) increased by 14.60 percent up from the growth of 12.65 percent in FY 2012-13. The higher growth of M1 was mainly due to significant increase in demand deposit growth (from 9.29 percent at end June'13 to 15.50

percent at end June'14), despite a slight decrease of currency notes and coins (from 13.85 percent to 15.64 percent) with the public (BER, 2014).

Similarly, M2 increased by 16.09 percent, slightly lower than 16.71 percent growth a year earlier. During this period, time deposit increased by 16.48 percent compare to 17.80 percent mainly attributed to decrease in broad money growth. On the other hand, in FY 2013-14, reserve money increased by 15.46 percent at the end of June 2014, as compared to 15.02 percent growth in the previous year. The growth of reserve money was mainly attributable to the increase in Net Foreign Assets (NFA) of Bangladesh Bank by 42.86 percent. However, Net Domestic Assets (NDA) of Bangladesh Bank decreased by 290.64 percent during this period.

Year-on-year growth in domestic credit was 11.57 percent during FY 2013-14, slightly higher than 11.02 percent during FY 2012-13. Sector-wise analysis of domestic credit indicates that the net credit to the Government sector increased by 6.72 percent at the end of June 2014 as compared to the growth of 20.05 percent during the previous year. Private sector credit growth was 12.27 percent in FY 2013-14, slightly higher than year-on-year growth of 10.85 percent in FY 2012-13.

Interest Rate

With a view to creating competitive environment for the banks, Bangladesh Bank has attempted to rationalise the interest rates. In order to ensure transparency, banks have been asked to inform Bangladesh Bank immediately in case of changing lending and deposit rates which they can change only once in a month. They have also been asked to upload deposit and lending interest rates on their respective websites. Moreover, guidelines have been issued to all banks to follow the housing finance credit-margin ratio 70:30 and rest of the loans (including motor-car loan) credit-margin ratio 30:70 under the consumer financing schemes (BER, 2014).

The weighted average rate of interest on commercial lending decreased to 13.10 percent at the end of June 2014, from 13.67 percent at the end of June 2013. Similarly, the weighted average deposit rate decreased to 7.79 percent from 8.54 percent over the same period. Thus, the interest rate spread stood at 5.31 percent at the end of June 2014, slightly widening the spread of 5.13 percent a year earlier.

Capital Market

The capital markets remained relatively stable during FY 2013-14. Reforms undertaken by the Government and Securities and Exchange Commission (SEC) to improve the market discipline and strengthen the market monitoring have helped stabilise the capital market. The number of listed securities of DSE (Dhaka Stock Exchange) increased from 525 at the end of FY 2012-13 to 536 at the end of FY 2013-14. The issued capital increased by 4.93 percent from Tk. 98,358.97 crore to Tk.1,03,207.60 crore during the same period. The market capitalisation of all shares of the listed securities at the end of FY 2013-14 stood at 21.79 percent of GDP, up by 0.68 percentage point at the end of FY 2012-13. The DSE Broad Index (DSEX) increased by 9.16 percent at the end of FY 2013-14 (BER, 2014).

On the other hand, the number of listed securities of CSE (Chittagong Stock Exchange) increased from 266 in FY 2012-13 to 276 in FY 2013-14. The issued capital increased by 9.84 percent from Tk. 47,072.19 crore to Tk. 42,856.43 crore during the same period. Market capitalisation of CSE at the end of FY 2013-14 stood at 16.93 percent of GDP, up by 0.91 percentage point of GDP in FY 2012-13. The general index increased by 8.07 percent in FY 2013-14 compared to the index at the end of previous fiscal year.

10.6. External Sector

Export

Despite the downturn in the global economy and the pace of slow and uneven recovery that has caused reduction in global domestic demand, Bangladesh's export earnings are still maintaining positive growth momentum. The exports registered a growth of 11.69 percent in FY 2013-14 amounting to US\$30,186.62 million. Export of woven garments and knitwear products increased by 12.70 percent and 15.02 percent respectively in FY 2013-14 compared to the same period of previous year (BER, 2014). Among the other major export items, earnings from frozen food (16.09%), leather (26.47%) and agricultural products (14.81%) contributed to the overall export growth, although export earnings declined for jute and jute goods (22.00%), petroleum products (48.59%) and light engineering products (0.23%).

Import

Import payments remained strong in FY 2013-14, increased by 19.39 percent compared to the preceding year. The total import payments (c&f) stood at US\$40,692.70 million during FY 2013-14, up from US\$34,083.60 million of the preceding year. The rise in imports of primary commodities (31.26%), industrial goods (11.09%), capital machinery (24.69%) and crude

petroleum and petroleum products (5.38%) contributed significantly to the overall increase of imports (BER, 2014).

Remittance

Although inflows of remittance declined by 8.50 percent in the first half of FY 2013-14, it rose by 5.61 percent in the second half amounting to US\$14227.84 million, 1.61 percent lower than a year earlier. The drop of overseas employment, especially in middle-eastern countries, was the main reason for lower remittance inflows. In FY 2013-14, 408,870 workers went abroad for jobs, down from 441,301 in the previous year. In FY 2013-14, remittance inflows from Saudi Arabia decreased by 18.56 percent, UAE by 5.11 percent, Kuwait by 6.74 percent, UK by 9.11 percent, Qatar by 10.25 percent and Singapore by 13.97 percent. On the other hand, remittance inflows from USA increased by 24.92 percent, Oman by 14.92 percent, Bahrain by 27.01 percent and Malaysia by 6.75 percent (BER, 2014).

Balance of Payments

The Balance of Payments (BoP) accounts reveal that trade deficit narrowed down marginally from US\$7,009 million in FY 2012-13 to US\$6,806 million in FY 2013-14. Despite lower trade deficit compared to a year earlier, the declined remittances and higher services deficit lowered the current account surplus from US\$2,388 million in FY 2012-13 to US\$1,346 million in FY 2013-14. The capital and financial accounts recorded a surplus of US\$3,719 million, from US\$3,399 million over the same period. Despite the lower current account surpluses, the overall balance increased to US\$5,483 million from US\$5,128 million a year earlier. Higher net medium and long term credits, large deficit in net trade credit lead the increase of overall balance of the Balance of Payments (BER, 2014).

Foreign Exchange Reserve

Foreign exchange reserves continued to grow as import slowed down, amidst decline in remittance inflows. It exceeded the US\$ 15 billion mark in June 2013 and US\$20 billion mark in April 2014. On 30 June 2014, foreign exchange reserves stood at US\$21.51 billion, providing about six months of import coverage (BER, 2014).

Exchange Rate

Exchange rate of Taka against US dollar remained almost stable during FY 2013-14, due to central bank active exchange rate management. The weighted average exchange rate stood at Taka 77.72 per US Dollar in FY 2013-14 while it was Taka 79.93 per US\$ in FY 2012-13

showing appreciation of about 2.76 percent. Despite slight fall in inward remittances and growth of import payments, Taka remained stable due to positive growth in export earnings. In FY 2013-14, Bangladesh Bank bought US\$ 5,150 million from the scheduled banks to ensure stability in exchange rate keeping in mind the interest of exporters and wage earners. Apart from these, other monetary policy instruments i.e. repo, reverse repo etc. have been used to keep the exchange rate stable (BER, 2014).

10.7. Labour Force Participation

In Labour Force Survey (LFS) 2010, conducted by BBS, a separate sampling frame was developed with the technical support of the Asian Development Bank using the 2011 census enumeration areas as the sampling frame. This sample consists of 1500 Primary Sampling Units (PSU). The PSUs were the enumeration areas of the Population Census 2001. Of the 1500 PSUs 325 were in the urban area and 1175 were in the rural area. As many as 43925 households were covered in the LFS 2010 of which 9325 were in the urban area and 34620 were in the rural area (BBS, 2011).

The estimated population from the LFS 2010 was 148.7 million and the population of working age population (15+) was 95.6 million. Of the total working age population 54.1 million were employed and 2.6 million were looking for job (unemployed). Thus, the total labour force of the country stands at 56.7 million in 2010 which was 49.5 million in 2005-2006. The labour force growth rate during period was estimated at 3.39 percent. The growth rate was 3.10% in the urban area and 3.48% in the rural area.

It is observed from the survey that about 1.8 million people are coming to labour market annually. The labour force participation rate was 59.3% in 2010 which was 58.5% in 2005-2006. It is notable that the female labour force participation rate increased from 29.2% in 2005-2006 to 36.0% in 2010. Labour force participation rate were higher in the rural area (60.0%) compared to urban area (57.3%).

The youth labour force of the country increased to 20.9 million in 2010 from 17.8 million in 2005-2006. Among the youth labour force 13.1 million are male and 7.8 million are female. Such numbers were 13.2 million and 4.6 million in 2005-2006.

10.8. Employment and Unemployment

According to LFS 2010, the unemployed population of the country stands at 2.6 million which was 2.1 million in 2005-2006. The corresponding unemployment rates were 4.5% and 4.3% respectively. It is mentionable that unemployment rate increases if unpaid family helpers working less than 15 hours a week is considered . In that case unemployment rate stands at 14.16% for the total population, 6.63% for male and 31.49% for female (BBS, 2011).

Among the employed population 47.6% were employed in agriculture sector and the rest were in manufacturing (12.0%), service (35.0%) and other industry (5.3%). As regards occupational distribution of the population it was observed that the highest 47.4% were engaged in agriculture, forestry and fishery occupation followed by production and transport labourer (22.8%) and sales worker (15.0%).

As regards growth rate of occupation, the highest growth rate was observed for sales workers (42.57%) followed by administrative and managerial occupation (36.83%). This may be due to expansion of service sector of the country in the recent year. It is notable that 87.5% of the employed population are in the informal sector and the rest 12.5% were in the formal sector. It is observed that the highest 64.0% employed are engaged in sole proprietorship organization followed by households (21.6%) and private enterprise (6.0%). The growth rate of population by industry shows highest growth in real estate, renting and business services (24.47%) mining & quarrying (18.98%) and construction (13.52%).

Regarding status of employment of the employed population the highest 22.8% were self employed in agriculture followed by unpaid family helper (21.8%) and regular paid employee (14.6%). In the urban area the highest 30.3% were regular paid employee followed by self employed in non-agriculture (21.7%) and unpaid family helper (17.1%). On the contrary, in the rural area, the highest 27.7% were self employed in agriculture followed by unpaid family helper (23.2%) and day labour in agriculture (12.8%).

GLOSSARY

Accrual basis

An accounting method that records transactions when the ownership of a good or of an asset changes hand, or when the provision of a service and factor of production takes place, regardless of when payment is made or received.

Asset

Economic assets are resources over which ownership rights are enforced and from which future economic benefits may flow to the owner.

Balance of payments

A statement that summarizes the transactions between the residents of an economy and nonresidents during a specific period, usually a year. Transactions recorded in the BOP include the exchange of goods, provision of services and factor of production, donations and transfers, exchange of assets, incurrence and extinction of liabilities. The BOP is recorded on an accrual basis.

Balance sheet

A summary of the stock of assets and liabilities of an economic unit on a given date.

Broad money (M2)

A measure of the money supply that includes both money (currency and checking deposits) and quasi-money (time, saving deposits and money market fund accounts).

C.I.F.

Cost, insurance, and freight, or charged in full. The charges for delivering a good to the place where it will be consumed. Sometimes imports are measured on the basis of these costs.

Capital Account

The capital account in the international accounts shows (a) capital transfers receivable and payable between residents and nonresidents and (b) the acquisition and disposal of nonproduced, nonfinancial assets between residents and nonresidents.

Cash basis

An accounting method that records transactions when payment is made or received.

Central Bank

The central bank is the national financial institution (or institutions) that exercises the control over key aspects of the financial system and carries out such activities as issuing the currency, managing international reserves, transacting with the IMF, and providing credit to Other Depository Corporations.

Compensation of employees

Total remuneration, in cash and in kind, payable to government employees in return for work done during the accounting period, except for work connected with own-account capital formation. Includes both wages and salaries and social contributions made on behalf of employees to social insurance schemes.

Consumer price index (CPI)

A measure of the general level of prices based on the cost of a typical basket of consumer goods and services.

Consumption of fixed capital

The decline, during the accounting period, in the current value of producers' fixed assets as a result of normal obsolescence, physical deterioration, or accidental damage. The consumption of fixed capital differs from depreciation in business accounting primarily because the assumptions governing the valuation of assets, taxation, and inflation accounting differ.

Current Account

The portion of the BOP that records transactions in goods, services, return accrued or payable for providing or using factors of production, and current transfers.

Depository corporations (DCs)

Financial institutions, such as commercial banks, that accept deposits.

Depository Corporations Sector

The central bank, the commercial banks, savings and loans institutions, microfinance institutions, credit unions, rural and agricultural banks etc. The Depository Corporation Sector provides financial intermediation by accepting deposits from private sector agents and lending to other private sector agents and to the public sector.

Depository Corporations Survey

The consolidated balance sheet of the central banks and the other depository corporations. The survey provides a statistical measure of money and credit in the economy.

Direct investment

A type of investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy.

Employer

is a self-employed person who may employ one or more persons in a commercial or industrial enterprise. A person employing non-productive servants such as domestic servants was not considered as an employer for the purpose of this survey.

Employed person

is a person who was either working one or more hours for pay or profit or working without pay in a family farm or enterprise or organization during the reference period or found not working but had a job or business from which he/she was temporarily absent during the reference period.

Exports

Goods and services produced in the domestic economy and sold to the rest of the world. Exports include both physical goods, and services. Exports are valued at the market price at the time of the transaction and are recorded f.o.b.

Financial account

The portion of the BOP that records transactions in assets and liabilities. The financial account records transactions in direct investments, portfolio investments, financial derivatives and employee stock options, other investments, and reserves.

Flows

Formally, the difference between the value of a stock between the end and the beginning of a period. A flow can be explained by transactions, valuation changes, and other changes in volumes. Commonly, flows and transactions are used interchangeably.

Free on board (F.O.B.)

A means of valuing goods that includes the costs of manufacturing, loading, and shipping to a national border but not the costs of transporting the goods beyond the border. In the BOP, imports and exports are generally valued f.o.b.

General government sector

All government units operating in a country; is comprised of the central government; state (or provincial or regional), and local governments, including municipalities and school boards. Social security funds are part of the general government, but nonfinancial public enterprises and public financial institutions are not, as they are classified as public corporations.

Goods

Physical objects for which consumption and production can be clearly separated.

Gross domestic product (GDP)

The market value of all final goods and services produced within a country in a given period. The GDP is determined using data for production, expenditures, or income and is presented in current or constant prices.

Gross fixed capital formation (GFCF)

The value of producers' acquisition less disposal of fixed assets. Gross fixed capital formation includes major improvements to existing fixed assets but excludes expenditures for small tools and military equipment.

Gross national income (GNI)

The sum of GDP and net foreign income generated by production activities abroad. GNI was GNP in pre-1993 versions of the SNA.

Households

The consuming population of an economy. They buy goods and services in the market for products, and sell labor, land and capital on various factor markets. Households make decisions

about how much to spend on consumer goods and services, and how much to save, and how to allocate their savings as holdings of alternative financial and real assets (cash on hand, bank savings deposits, bonds, home ownership, and so forth.)

Imports

Goods and services that the domestic economy purchases from the rest of the world. Includes physical goods and services. Imports are valued at the market price at the time of the transaction. They are generally recorded f.o.b.

Inflation

A sustained increase in the general price level. The rate of inflation is the percentage change in the price level in a given period (usually one year).

Interest rate

The annual return on a fixed-priced financial asset expressed as a percentage of the price of the asset.

International investment position (IIP)

A statement that summarizes the value and composition of the stock of assets that residents of the economy hold on nonresidents, and of the liabilities that residents hold towards nonresidents, at a certain point in time.

Labour force (economically active population)

Economically active population or labour force is defined as persons aged 15 years and over, who are either employed or unemployed during the reference period of the survey (week preceding the day of survey). It excludes disabled and retired persons, income recipients, full time housewives and students, beggars and other persons who did not work for pay or profit at least one hour during the reference week.

Liability

The counterpart of a financial claim. A liability generate the obligation to current or future transfers of economic benefits.

Monetary gold and SDRs

Monetary Gold and SDRs are issued by the IMF and are financial assets for which there are no corresponding financial liabilities. Monetary gold consists only of gold held by the central banks or the government (or by others) subject to the effective part of the official reserves. Gold holdings that are not part of official reserves are classified as nonfinancial assets.

Narrow Money (M1)

A stock of wealth that includes currency in circulation and all the deposits of the private sector and nonfinancial public enterprises that can be used to make payments (transferable). Narrow money is considered a liability of the Depository Corporations Survey.

Net lending/borrowing

Equal to revenue minus expenses and net acquisition of nonfinancial assets. The balance is generally referred to as the budget surplus or deficit of the given level of government. Also equal to the net acquisition of financial assets minus the net incurrence of liabilities.

Net operating balance

The balance of transactions affecting net worth. Equal to Revenue minus Expense.

Net worth

Also referred to as Net Wealth Position, equals the stock of assets minus liabilities.

Non-resident

Economic agents (enterprises, individuals, non-profit organization, the government, etc.) that are not resident of the economy.

Not in labour force/inactive

A person who was not engaged in a economic activity. Regular full time students though engaged in household activities in leisure time were treated as inactive and remained outside the labour force. Household work also belongs to this category.

Other depository corporations (ODCs)

The Other Depository Corporations are resident financial corporations (except the central bank) and quasi-corporations that are mainly engaged in financial intermediation and that issue liabilities included in the national definition of broad money.

Output

Goods and services produced by enterprises and made available to other enterprises and consumers. Output is calculated as the sum of total sales and net changes in inventories. Several different types of output can be distinguished: (i) products that are sold; (ii) products that are bartered; (iii) products that are destined for own-account uses; and (iv) products that are added to inventories.

Portfolio investment

Investments involving debt or equity securities, other than those included in direct investment or reserve assets.

Regular worker/employee

is one who has a regular employment and receives wages or salary from the enterprise or establishment or organization to which they are attached for performing assigned work.

Remittances

Transfers of savings from individuals who have been residing abroad for a year or more to residents of the economy.

Residents

Economic agents (enterprises, individuals, non-profit organization, the government, etc.) for whom the economy constitutes the center of predominant economic interest. An enterprise is a resident if it engages in production or owns land or buildings. An individual is a resident, regardless of citizenship, if he or she has resided in the country for a year or more. All agencies of the government are residents, even embassies located abroad.

Rest of the world sector

All nonresident units that enter into transactions with residents or have claims on residents.

Revenue (government)

An increase in net worth resulting from a transaction. The main categories of revenues are: taxes, social contributions, grants, and other revenue.

Savings

Disposable income that is not spent on the consumption of goods or services.

SDR (special drawing right)

A monetary unit of account whose value is determined by the combined value of a basket of major currencies: the U.S. dollar, the euro, the pound sterling, and the yen.

Seigniorage

The difference between the value of money and the cost to produce it – in other words, the economic cost of producing a currency within a given economy or country.

Self-employed

means a person working for his/her own household farm or non-farm enterprises for profit or family gain. Such persons do not receive wages or salary for the work performed.

Services

Heterogeneous output which is the result of a production activity that changes the conditions of the consuming units, or facilitates the exchange of products or financial assets. Services are not generally separate items over which ownership rights can be established and cannot generally be separated from their production.

Stocks

Holdings of physical and financial assets and liabilities at a point in time. Stocks are reflected in a balance sheet. Transactions during a period change the size of a stock.

Subsidies

Current payments made by the government to enterprises. Subsidies are distributed on the basis of production levels, quotas, or the value of the goods or services produced, sold, or imported. Subsidies are not payable to final consumers.

Tax

A compulsory contribution exacted by the government to pay for public goods. The major categories are taxes on income, profits and capital gains; on payroll and workforce; on property; on goods and services; on international trade and transactions; and other taxes.

Transaction

A transaction is an interaction between two economic agents that occurs by mutual agreement or through the operation of the law and involves an exchange of value or a transfer.

Transfer

Transactions in which a good, service, or asset is provided without receiving anything in return. Transfers may be in cash or in kind; public or private; domestic or external; and current or capital. Also known as one-sided transaction.

Unemployed person

is a person who is involuntarily out of gainful employment during the reference period but either – (a) has been actively looking for a job or (b) was willing to work but not looking for work because of illness or believing that no work was available.

Under-employment

is the condition whereby a person's employment is considered inadequate in terms of time worked, income earned, productivity or use of his/her skill and the person is looking for additional work in conformity with his/her education or skill to augment income.

Wages and salaries

All compensation of government employees, in cash or in kind, except for social contributions.

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