



**TRAINING MANUEL
ON ECONOMIC AND SOCIAL
POLICY IN AFRICA FOR TRADE UNIONS**



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December 2012

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Acknowledgements

ITUC-Africa is very grateful to SASK, a Finnish Trade Union Centre, and to its affiliates SAK and STTK for their financial support towards the production of this important tool which aims to promote research in the African trade union movement.

This manual is the outcome of a series of exchanges and collaboration during a number of workshops that have involved trade union leaders and experts as well as resource persons from the trade union movement and academia. ITUC-Africa wishes to express its appreciation to all the people, especially *Dr Trywell Kalusopa*, Senior Lecturer/Researcher at University of Botswana and *Mr Grayson Koyi*, Lecturer/Researcher at University of Zambia for their valuable contribution to the development of the English version of the manual.

Finally, ITUC-Africa wishes to express its gratitude to everyone who, in one way or another, has contributed to the development of this tool which is meant to improve research within the trade union movement in Africa.

Preface

History attests that following the first decade of independence most African countries achieved high economic growth. However, various crises emerged from the mid-1970s onwards, in particular, the generalised public sector crisis caused by inappropriate macroeconomic policies and exogenous shocks led to adoption of structural adjustment policies by African governments. The austerity measures in such policies had negative effects on growth in the succeeding years. Most African countries have failed to achieve sustained economic growth and development.

Mainstream economists and most governments believe that neo-liberal policies based on “market forces” and international competitiveness should play a prominent role in solving this problem. However, such policies have failed as more and more people are sliding into poverty, unable to improve their livelihoods. Thus, there is an urgent need for an alternative sustainable development strategy which can take various forms. Sustainable human development is development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

Africa’s persistent harsh realities require trade unions across Africa mobilise themselves into a more formidable force to develop an alternative path to development. At the core of this is the need to develop capacity in research within the African region. There is need for Africa to become a reference point for production of the relevant research, information and knowledge in support of trade unions and workers. This means, in the light of neo-liberal globalization, ITUC-Africa should continue influencing policy at global, regional and national levels, by strengthening its affiliates’ capacity in the area of policy engagement and advocacy. This can be realised among other ways by developing the ability of researchers to conduct pro-labour and policy oriented research.

Our hope in preparing this manual is to provide trade unions in Africa with a valuable tool to enhance trade union work and support trade unions’ ability to intervene on economic and social policies. By doing so, trade union actors would be able to make better contributions in social dialogue bodies on

development programmes and strategies, promote and defend workers' rights and ensure decent work for all workers and greater social cohesion, which will contribute to genuine development in Africa.

Kwasi Adu-Amankwah

General Secretary of ITUC-Africa

List of abbreviations and acronyms

ALRN	African Labour Research Network
ANSA	Alternatives to Neo-liberalism in Southern Africa
AU	African Union
CPI	Consumer Price Index
ECA	Economic Community for Africa
EU	The European Union
FES	Friedrich-Ebert Stiftung
GDP	Gross Domestic Product
GNP	Gross National Product
GUFs	Global Union Federations
HIPC	Heavily Indebted Poor Countries
HPI	Human Poverty Index
ILO	International Labour Organisation
ICFTU	International Confederation of Free Trade Unions
ITUC	International Trade Union Confederation
LDC	Least Developed Countries
MDGs	Millennium Development Goals
MMR	Mixed Methods Research
UNDP	United Nations Development Programme
SAPs	Structural Adjustment Programmes
TDM	Total Design Method
UN	United Nations
US	United States of America
WCL	World Confederation of Labour

About the manual

This training manual is developed within the framework of the activities of the project entitled "Strengthening ITUC-Africa's interventions in the area of economic and social policy" and operationalizes the 2008-2011 Strategic Action Plan.

During the implementation of this project, about forty trade union experts from 30 affiliated organizations from 28 African countries including 17 French speaking countries (Benin, Burkina Faso, Burundi, Cameroon, Congo, Côte d'Ivoire, Gabon, Guinea, Mali, Mauritania, Niger, Central African Republic, Democratic Republic of Congo, Rwanda, Senegal, Togo and Tunisia) and 11 English speaking countries (South Africa, Botswana, Ethiopia, Ghana, Kenya, Malawi, Tanzania, Sierra Leone, Swaziland, Uganda and Zambia) participated in four training sessions on research organised by ITUC-Africa.

In 2012, within the framework of this project, about ten organisations among the thirty organisations involved conducted field research on topics related to employment, decent work, living conditions of workers and poverty reduction, trade issues and regional integration.

The manual is divided into five modules. Each module states clearly its objectives and the various aspects it addresses. The first module deals with industrial relations and trade union economic and social priorities. The second module presents the trade union research methods and procedures. Statistics for trade union actions are discussed in Module Three. The fourth module is devoted to the various aspects related to the functioning of the national economy. The fifth and last module discusses contemporary issues related to economic and social development in Africa.

Kouglo Boévi Lawson Body

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MODULE ONE: INTRODUCTION

In this first module, we introduce a framework of thought that creates the background for understanding of why trade union research is critical in countering the negative effects of globalisation given the development challenges that Africa faces. At the end of the session, trade union researchers should be able to:

- Understand Africa's development stakes and challenges in face of globalisation;
- Appreciate importance of trade-union research in Africa; and
- Understand the current priorities of trade-union research in Africa in the context economic and social policy

1.1 Africa in the face of the stakes and challenges of globalisation

It is clear that no matter what the debate is, globalization as a concept and practical socio-economic reality has taken a centre stage. Globalisation now rules the world economic order. Globalization is usually defined as the integration of trade, technology, investments, capital and labour markets throughout the world. Usually, it involves opening up of the national economies into the global one, creating a global village. One scholar on globalisation, Sutcliffe (1999:1) once summed it as “the conversion of the world into a single economic space, one macro economy, or perhaps mega economy, and so... as a result, into a single seamless society and culture”.

Globalization is often associated with increased reliance on the regulation of economic relations by markets. It is a degree of interdependence which goes far beyond simple expansion of free trade, the main indication of the internationalization of the economy in the past. (ICFTU; 2001:9). It includes integration of production across national boundaries with significant increases in international investment by multinational enterprises. (ICFTU; 2001:9). Globalization is not just a change in production and supply relationships. (ICFTU; 2001:9) It is an unprecedented rapid and massive movement of

¹ The International Confederation of Free Trade Unions (ICFTU) and the World Confederation of Labour (WCL) amalgamated to form the International Trade Union Confederation (ITUC) on 1st November, 2006.

capital. Globalization is said to be a result of several developments and processes which are generally linked together. These include the growth and relative importance of foreign direct investment, which provides a greater role for multinational companies, internationalization of financial markets, deregulation and liberalization of markets, privatization of the public sector and the development and diffusion of communication transport and technology. (ICFTU; 2001:10)

Globalization is based on a neo-liberal agenda that believes in the efficacy of unfettered market forces. It is characterized by the uneven distribution of benefits, growing inequality within and between nations and increased volatility of capital markets. It is driven by corporate capital and largely serves its interests at the expense of the masses. Thus as observed by many, most national governments in Africa adopt liberal approaches to macroeconomic management, implying privatization, monetary liberalization, reduction in import tariffs, labour market flexibility and fiscal discipline.

It is therefore important that the workers understand the clear context of global injustice driven by globalization. Trade unions should actually know who is shaping it, that is, *who owns it, who benefits, who wins, who loses and who has the future in it*. In the labour market, globalization has been accompanied by increased insecure types of employment, mainly through the phenomenon of casualisation. Increased competition, especially for foreign direct investment, has resulted in the undermining of human and trade union rights, especially the right to organize and negotiate. Thus, apart from thousands of workers losing their jobs because of market liberalization, the spectre of the working poor has also developed. Many workers are not only employed in tenuous jobs but thousands are now working in the unprotected informal economy. In all, globalization means the ever-changing and intensifying network of global consciousness, interdependence, human interaction and societal transformation. These changes influence the fortunes of workers in economic, political, cultural terms. Thus these challenges can be summed as:

- ✓ Poverty,
- ✓ Unemployment
- ✓ Underemployment
- ✓ Retrenchment
- ✓ Casualisation
- ✓ Informalisation

- ✓ Outsourcing
- ✓ Capital flight, etc.

1.2 Importance of Trade Union Research in Africa

In order to counter-balance the influence of global corporations' excesses, there is need for capacity building in the area of research and knowledge on trade and investment and global processes to ensure that trade unions can play a more effective role in shaping the global economy. The emergence of global unions has been a positive development to countering the globalization process. This has been necessitated by the emergence of transnational companies which are part of capital's global strategy in the wake of globalization. This means that national trade unions should align themselves with these global unions to fight for global justice as matter of practical survival. In this context the building of evidence-based research on alternatives to development is of critical concern.

In this manual, we define research here as simply a systematic inquiry characterised by a certain amount of rigour and governed by sets of principles and guidelines for procedures. It involves collection of and analysis of information of the social world order so as to understand and explain it better. There are several reasons that can be advanced as to what necessitate the need for research this among trade unions, among them:

- ✓ Need to improve on trade union participation in the labour related policy formulation, monitoring, evaluation process;
- ✓ Need to build capacity in research and leadership;
- ✓ Need to improve workers welfare;
- ✓ Need to monitor the economic trends of the countries in Africa;
- ✓ Changing global perspective of labour relations in the context globalisation;
- ✓ Linking of labour research to education, organising, advocacy, leadership development, affiliate support in traditional TU issues such as bargaining, OSH, case management (dealing with specific workplace grievances & disputes – currently lawyers, labour brokers are replacing TUs in case work)
- ✓ Basis for “back-room” capacity behind statements, activities and positions of labour in development process.

1.3 Priorities of Trade Union Research in Africa

The response of trade unions to the development challenges in context of globalisation has been mixed. In the 1960s moving through to the new millennium, trade unions in Africa have been instrumental in the struggle for political independence and democratization as well as the economic rights of workers across the continent. However, since the 1980s and the 1990s the labour movement in Africa has been confronted with several daunting challenges in the effort to protect workers' rights and the rights of the weak, the poor and the vulnerable.

Based on the socio- economic development context and the response – or non-response - of the African labour movement to date, the following have been identified key research themes that have and continue to guide its interventions:

- ✓ Minimum wage
- ✓ Youth employment / unemployment
- ✓ Employment policy
- ✓ Social protection
- ✓ Domestic workers
- ✓ Pro-poor Budget analysis
- ✓ Development of wage indicators
- ✓ Gender audit
- ✓ Comparative analysis of social dialogue mechanisms
- ✓ Economic performance and its impact on wage determination
- ✓ Trade and Investment policies
- ✓ Regional Integration
- ✓ Labour Migration

Practical Self Test Exercise

- 1) What paradigms have shaped research in Africa over the years?
- 2) How has the importance of research been articulated in your unions?
- 3) What have been the opportunities and threats in advancing the value of research in your unions?
- 4) How have you tried to link research in your union to current trends global and national trends (development of themes)

MODULE TWO: RESEARCH METHODS AND PROCEDURES

In module, we shall deal with methods and procedures of trade union research. At the end of this session, trade union researchers should be able to understand the following:

- Definition, requirements and principles of research
- Paradigms and types of research
- Qualitative, Quantitative and Mixed Methods Divides
- Role of Literature review in research
- Research methodology and design
- Practical exercise : construction of data collection instruments
- Basics on data processing and analysis
- Writing a research proposal
- Writing an effective research report

2.1 Definition, requirements and principles of research

Research is a process. It can be said to be a systematic inquiry characterized by a certain amount of rigour and governed by sets of principles and guidelines for procedures. In any research, you should start off by conceptualizing the research problem. This can come from:

- ✓ Something in prior research that attracts your interest;
- ✓ A need to know based on practice (e.g., you observe a problem in the trade union and wish to understand its causes better; and/or need to develop a solution to the problem)
- ✓ "Just because" curiosity about something!

It is important to note that:

- Approach will depend on your problem; and
- There should be a relation among choice of topic, methods, theoretical and practical considerations

2.2 Paradigms and Types of Research

Research as a social inquiry is founded on particular philosophical assumptions. Over the years, research has, therefore, been built on several contending paradigms or philosophies. In the social sciences, two notable and major research traditions, namely the positivist and interpretative have guided the styles of reasoning and ultimately shaped specific research methodologies and outcomes. These are positivism interpretivism.

Positivism refers to researchers attempting to apply natural sciences research methods to the social sciences; whereas interpretivism is where researchers emphasise the meanings made by people as they interpret the world in a natural setting. Positivism is associated with deductive reasoning which is usually linked to hypothesis testing. In deductive reasoning, an argument moves from the general principles to particular instances. Interpretivism on the other hand, is associated with inductive reasoning. Inductive reasoning begins with particular instances and concludes with general statements or principles. It is associated with hypothesis generation in that field work and observations occur initially and hypotheses are generated from data collected. Usually, the positivist paradigm has been associated with quantitative research methods but authorities argue that qualitative methods are also used particularly by post-positivists. Equally, interpretivism is largely associated with qualitative methods but quantitative methods may be used as well.

2.3 Qualitative, Quantitative and Mixed Methods Divides

The quantitative and qualitative research paradigms are the most widely recognised and used in the social sciences in general. Of late, however, there has been the re-examination of this “two-horse” race paradigm, with several authorities advocating a third emerging paradigm called the mixed methods research (MMR).

By definition, quantitative research is usually defined as an objective approach which includes collecting and analysing numerical data and application of statistical tests, such as frequencies and central tendencies (mean, median and mode), whereby conclusions can be deduced. Golafshani (2003:597) summarises quantitative research as a paradigm where:

- ✓ Emphasis is on facts and causes of behaviour measured by predetermined instrument;
- ✓ Reliability - measured as reliability of results, and validity as accuracy of measurement are essential tools;
- ✓ The information is in the form of numbers that can be quantified and summarised;
- ✓ The mathematical process is the norm for analysing the numeric data; and
- ✓ The final result is expressed in statistical terminologies.

On the other hand, a qualitative research is a subjective approach which includes examining and reflecting on perceptions in order to gain an understanding of social and human activities. Thus qualitative research uses a naturalistic approach to study and understand context-specific setting such as the “real world setting where the researcher does not attempt to manipulate the phenomenon of interest” (Patton, 2002:39). Unlike quantitative researchers that would seek to understand the casual determination, prediction and generalisation of findings, qualitative researchers, seek illumination, understanding, and extrapolation to similar situations (Golafshani, 2003; Hoepfl, 1997). In that regard, we can also summarise the qualitative research paradigm as:

- ✓ Emphasizing understanding a phenomenon in a naturalistic or context-specific environment;
- ✓ Reliability and validity are conceptualized as “trustworthiness, rigour” and quality through triangulation;
- ✓ Increased involvement of researchers in the research process rather than dissociation guided by the question of objectivity; and
- ✓ Analysis of results enjoys the compatibility of research methods such as interviews and observations with the reward of using both numbers and words.

Currently, mixed methods research is a rapidly emerging alternative research paradigm. It is important to note that the combination or integration of both approaches has been a subject of intense debate for a long time and can be traced to three decades ago. In recent times though, scholars have continued this debate. For example, Bradley and Sutton (1993); Sutton (1993), are of the view that these approaches represent different ways of viewing reality and therefore cannot be combined. Others such as Ford (1987) have argued for

the integration of two paradigms depending on the research problems under consideration; while Mellon (1990:5) though agreeing with such integration, warns that great care needs to be taken since the methods are “separate and distinct from one another, with different purposes, methods and outcomes”.

Many authorities have also cautioned against the temptation to vaguely combine the two approaches and call it mixed methods. They accordingly argue that mixed methods are simply not done for the sake of mixing. One authority offers a useful guidance that:

MMR involves collecting, analyzing, integrating and interpreting qualitative and quantitative data concurrently or sequentially in a single study or a series of studies investigating the same problem, irrespective of whichever research methodology is dominant, in order to exploit the benefits of combining them and to enhance the validity of the findings. (Ngulube (2010:254)

One can therefore deduce from the debate above that there is no best research methodology that can be used to carry out an investigation; instead researchers try to adapt appropriate methodologies depending on the type of study. Authorities in research methodology further advise that the criterion for selecting an approach takes into account many factors that may include the research problem, the personal experience of the researcher, and the audiences.

Practical Self Test Exercise

- 1) How would define research?
- 2) Discuss the major paradigms that guide research in the social sciences.
- 3) With a practical example in trade union research, explain what could guide the choice of a particular research methodology?

2.4 Role of Literature Review in Research

Literature review is the selection of available documents both published and unpublished on the topic of study which contain information, ideas, data and evidence written from a particular standpoint to fulfill certain aims or express certain views on the nature of the topic and how it will be investigated. It is the guide that assists researchers to accomplish their research tasks. For example:

- ✓ It enables the researcher to choose an appropriate research topic, prepare an adequate research plan and formulate reliable objectives, research questions and hypotheses.
- ✓ Literature review further assists researchers in designing appropriate research methodologies and data collection instruments.
- ✓ Literature review assists in identifying theories and ideas that are tested for the purpose of developing a theoretical or conceptual framework.

A researcher wishing to review literature can use books, scholarly journal articles, dissertations and government documents or policies. Literature review may be purely descriptive, as in an annotated bibliography, or it may provide a critical assessment of the literature in a particular field, stating where the weaknesses and gaps are, contrasting the views of particular authors, or raising questions. Such a review will not just be a summary but will also evaluate and show relationships between different materials, so that key themes emerge. Even a descriptive review however should not just list and paraphrase, but should add comment and bring out themes and trends. Literature review can be historical, thematic, theoretical or empirical and it is usually recommended that a combination of these may be adopted.

2.5 Research Methodology and Design

In the research process, the statement of the problem is the 'heart and soul of it all', the research methodology can be said to be the 'blue print', in that, it explains how the research questions will be answered and, therefore, serves as a bridge between research questions and execution of the research, thus explaining how a researcher conducted a particular study.

2.5.1 Research Methodology

The methodology is a plan that provides the overall framework for collecting data and also allows the researcher to draw conclusions between variables. Hence, once the problem has been correctly formulated, a methodology is developed in order to provide a format for the detailed steps in a study. Kothari (2004:31) says this involves the “decisions regarding what, where, when, how much, by what means concerning an inquiry or a research study”.

2.5.2 Research Design

A research design is a set of guidelines and instructions to be followed in addressing the research problem. The main function of a research design was to enable the researcher to anticipate research decisions and also to maximize the validity of the eventual results. Thus depending on the research problem and the paradigm a researcher may adopt a survey, case study or any other appropriate design. For example a researcher that wants to gather information from the population at a single point in time say how labour organisations adopt information communication technologies (ICTs) could use a cross sectional survey. A survey is a method of gathering data from a group of individuals in order to learn something about the larger population. A survey involves acquiring information about one or more groups of people, for instance, about their characteristics, opinions, attitudes or previous experiences. On the other hand, a researcher that wants to study in detail say a one labour organisation as a unit may use a case study. Case studies are beneficial as they enable the researcher to closely examine the data within a specific context, explore and investigate contemporary real-life phenomenon through detailed contextual analysis of a limited number of events or conditions, and their relationship.

2.6 Research Procedures, Research Instruments and Methods of Data Collection

In any research process, the choice of the paradigm discussed above will usually lay the ground for the type of research strategy that has to be employed. It is important in research to explain your population and sample, research procedures, research instruments and methods of data collection.

2.6.1 Study Population

Population of the study refers to the body of people or collection of items under consideration for research. Thus for example, a set of records, or an event, or an institution, or people could constitute a study population. Further, depending on the size of the population and the purpose of the study, the whole universe or subset of the population (sample), can be studied. In most cases, time and cost considerations, does not make it possible to study the whole population though this is the most desirable situation. For most small populations, however, it is preferred that the whole population is studied. A study of the entire population is called a census.

Many scholars affirm that there is no point in sampling a population of less than 100 units of analysis. For instance, Williamson and Bow (2000:72) observes that there is a common misunderstanding by “novices undertaking survey research” regarding the “concepts population and sample” and points out that “where a population is small, for example, a small business of 50 employees, it is feasible to survey all elements of that population”. Ngulube (2005:130) also affirms that it is generally agreed that there is little point in sampling populations of less than 100.

2.6.2 Sample

Sampling refers to some sampling procedures which involve some form of selecting elements from the target population. There are two types of sampling methods which are the probability sampling methods and non-probability methods. The sampling procedure that was used in the study was the simple random sampling method. Simple random sampling is when every item/ entity has an equal chance of being chosen. Any sampling method should be used to insure representativeness of the whole population, that is, every participant should have a chance to be selected.

The key reason for being concerned with sampling is that of *validity*—the extent to which the interpretations of the results of the study follow from the study itself and the extent to which results may be generalized to other situations with other people.

Sampling is critical to *external validity*—the extent to which findings of a study can be generalized to people or situations other than those observed in the study. To generalize validly the findings from a sample to some defined population requires that the sample has been drawn from that population according to one of several *probability* sampling plans. By a *probability sample* is meant that the probability of inclusion in the sample of any element in the population must be given *a priori*. All probability samples involve the idea of *random sampling* at some stage. In experimentation, two distinct steps are involved.

- ✓ *Random selection*—participants to be included in the sample have been chosen at random from the same population. Define the population and indicate the sampling plan in detail.
- ✓ *Random assignment*—participants for the sample have been assigned at random to one of the experimental conditions.

Another reason for being concerned with sampling is that of *internal validity*—the extent to which the outcomes of a study result from the variables that were manipulated, measured, or selected rather than from other variables not systematically treated. Without probability sampling, error estimates cannot be constructed.

Perhaps the key word in sampling is *representative*. One must ask oneself, “How representative is the sample of the survey population (the group from which the sample is selected) and how representative is the survey population of the target population (the larger group to which we wish to generalize)?”

- ✓ When a sample is drawn out of convenience (a non probability sample), rationale and limitations must be clearly provided.
- ✓ If available, outline the characteristics of the sample (by gender, race/ethnicity, socioeconomic status, or other relevant group membership).

- ✓ Detail procedures to follow to obtain informed consent and ensure anonymity and/or confidentiality.

2.6.3 Data Collection Methods and Instrumentation

Data collection refers to ways in which the data is collected in the field, to a specified sample or study population. Usually, the research methodology influences the choice of the type of techniques and instruments that are used and that techniques employed for data collection should ensure their validity and reliability. The commonly used techniques and instruments are questionnaires, interviews, observation and document analysis.

Below we discuss four techniques that are usually employed for data collection, namely: questionnaire, interview, observation, and document review. Each of these tools is described in detail below.

(a) Questionnaire

Questionnaires are the most common instruments used in research. A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents. According to Mertens (2002), a questionnaire contains questions and is an instrument used for gathering data. Oates (2008) also defines questionnaire as a set of pre-defined set of questions (or items), arranged in a pre-determined order, whereby respondents are requested to answer those questions, thus providing the researcher with data that can be analysed and interpreted. The use of the questionnaire is one of the data collection methods whereby a selected group of participants are asked to complete a set of structured questions, to find out what they do, perceive, think or feel about it.

Many authorities do agree that the use of questionnaires has relative advantages and disadvantages. Some of the advantages of questionnaires are:

- ✓ Ability to collect data from a large number of people within a relatively short period of time;
- ✓ Ability to encourage frankness and completion without the researcher being present;

- ✓ Obtaining fixed standardized types of answers (with pre-defined range of answers) thus eliminating too much variation of answers; and
- ✓ Cheap and less time consuming.

On the other hand, they were of the view that the disadvantages of using questionnaires include:

- ✓ Failure of some respondents to get clarification on ambiguous questions when the researcher is not there; and
- ✓ Costs of printing or photocopying to meet the desired population may be considerably high.

Questionnaire Structure

When using a questionnaire, the responses are gathered in a standardised way so that questionnaires are more objective. Questionnaires are of different categories, closed (or structured) questionnaires, open-ended (or unstructured) questionnaires or may be both. In the closed questionnaire, respondents are provided with alternative answers in which they are required to select one or more answers depending on the way the question has been structured. While, in the open-ended questionnaire, respondents are not provided with alternative answers, they are permitted to provide great depth of free responses depending on the way the question has been structured. In other cases, they may be a combination of both.

Design of the Questionnaire

In designing the questionnaire it may be useful to review literature on questionnaire design. In literature, the major tools recommended in developing a questionnaire includes unstructured individual interviews, qualitative group interview, observations, and scanning literature for questionnaires used in similar studies.

Length and Layout of the Questionnaire

There are different kinds of questions used in the questionnaire, namely structured or close-ended questions, unstructured or open-ended questions and contingency questions, also called 'filter questions' and matrix questions,

which share the same set of response categories, the most common being the likert type scale.

There is always a debate about the length of a particular questionnaire and there seems to be no agreement. For example, it has argued there is need to have a modest length while others have argued that it should not be more than 10 pages and that the number of questions should not be more than 125. However, there are some criticisms regarding setting the number of pages and brevity of a questionnaire. Powell (1997:106) states that “the general rule is that the questionnaire should be as short as possible to encourage complete responses”.

Pre-testing the Questionnaire

Pre-testing is one of the key ways to estimate reliability and validity of research instruments. Authorities have observed that it is necessary to pre-test a questionnaire after it has been informally evaluated in order to refine the questions. When pre-testing, the researcher checks the effectiveness of the instruments to eliminate ambiguity and ensure that the respondents understand the questions as intended by the researcher, thereby ensuring validity. William, Burstein and McKemmish (2002) also assert that validity is concerned with data accuracy. It simply refers to the extent to which a research instrument is designed to measure what it is intended to. Reliability on the other hand refers to the ability of research instrument to obtain consistent and stable results with replication. Pre-testing is, therefore a research procedure meant to examine the validity and reliability of data to be collected for the purpose of obtaining consistent, dependable and accurate information.

There is no consensus on the number or composition of the sample for pre-testing the questionnaire. For example, some scholars have suggested a sample of individuals from the potential population under study. In terms of the actual numbers, some have suggested that it is important to at least pre-test your questionnaire with ten to twelve colleagues (or better yet) with representatives from the population you will be surveying. Other scholars also note that the number should be ten.

Administering the questionnaire

In order to ensure validity and reliability of the survey results, the questionnaires were administered based on the Total Design Method (TDM). The TDM model advocates the distribution of a carefully constructed, pretested instrument and a cover letter, and multiple follow-up contacts to encourage a high response rate”.

Response rate to the questionnaires

Scholars do not agree on what constitutes an adequate response rate. However, most agree that any response above 50% is adequate for analysis.

(b) Interviews

In addition to the questionnaire, interviews were used to complement questionnaire responses. An interview is an important way for the researcher to check the accuracy of what has been gained from an observation or questionnaire. The interview is an oral questionnaire, whereby an interviewee gives direct response to the interviewer orally through either face-to-face or answering through telephone. The use of interview is suitable when a researcher wants to: obtain detailed information, ask questions that are complex or open-ended, or whose order and logic might need to be different for different people, explore emotions, feelings, experiences, etc that cannot be determined by use of pre-defined questionnaire responses; and investigate sensitive issues, or privileged information that respondents might not wish to write about on paper. Despite these advantages, interviews have their own disadvantages which include: small population coverage, time consuming for the researcher, difficulty to meet appointments, lack of reliability, can be misleading, and require good interviewing skills.

(c) Observations

Another method which was used in the study was observation. It is defined as a process in which the researcher’s presence in a social situation is maintained for the purpose of investigation. In this technique, the researcher is able to compare what people do with what they said they do. Observation is a data generation technique used to find out what people actually do, rather than what they report when questioned. It involves looking, use of senses other

than sight, such as: hearing, smelling, touching and tasting etc, taken in either laboratory setting or natural setting

Observations can be conducted through non-participant and participant observation. In a non-participant observation, action and behaviours of what people do or what is the real situation is observed and recorded without the researcher being present. On the other hand, in participant observation, the researcher participates fully in the observation and recording of actions and behaviours of what people do, or studying the real situation of certain things in their natural or laboratory settings. Observations can also be structured. Structured observation is formal and has a focus on designated behaviour aspects. In such a case, the researcher has prior knowledge of the criteria to apply to observed behaviour. Such an observation is usually conducted in a methodical fashion and has a pre-determined framework.

There are advantages and disadvantages in using observation data collection technique. Onyango (2002) cites the following as some of the advantages of observation:

- ✓ Possibility to record behaviour as it occurs;
- ✓ Allows the researcher to compare what people actually did against what they said;
- ✓ Can identify or highlight behaviours and actions as people might not think it is important to report as they might perceive them to be irrelevant; and
- ✓ Subjects that are unable to give verbal reports or communications in common language can also be studied.

On the other hand, the disadvantages of observation include:

- ✓ It is not always possible to anticipate events and be able to observe instantly;
- ✓ Feasibility of observation can be affected by the duration of an event; and
- ✓ It is more difficult to quantify observational data than other forms of data (i.e. behaviour doesn't easily break down into categories).

(d) Document review and analysis

Documentary review is another source of data collection that can supplement the use of questionnaires, interviews, and observations. Documents comprise written material and other documents from the cases under investigation. Documentary review refers to the study on documents that detail procedures, policies, acts and standards as requirements for proper functioning of an organization.

There are two types of documentary reviews, namely: the found documents and research generated documents. According to Oates (2006), found documents consist of existing documents in the organisation, which include: production schedules, procedure manuals, job description, profit and loss accounts etc. On the other hand, research generated documents are documents that have been generated by other researchers or produced as a result of daily organisation business such as photographs, data flow diagrams, monthly recording of different kinds of requests from help desk (Oates, 2006). Within public offices, there are documents produced by organisations such as formal records, minutes, information communications etc. (Oates, 2006). In addition, previous research documents on organisations such as research data and field notes, publicity funded surveys, and internal organisational research etc. can be a source of secondary data. Forms of documents obtained can be from visual sources of data, oral/sound recordings, or electronic records.

2.7 Reliability and Validity

Reliability and validity are concepts that have evolved and are rooted in positivist tradition, quantitative research. They are now often being used in interpretive or qualitative approaches as well. For quantitative research, reliability seeks to determine “the extent to which data or measurement is consistent” (Hernon & Schwartz, 2009:73). This means that one should be able to get similar results from a “different sample of the same population” or determine “to what degree an instrument measures the same way each time it is used under similar conditions with the same subjects” (Hernon & Schwartz, 2009:73). Validity on the other hand, determines whether the study and the research instruments measure that which it was intended or purported to

measure (Hernon & Schwartz, 2009; Golafshani, 2003). As summed up by Golafshani (2003:599), in quantitative research, reliability implies “whether the result is replicable” whereas validity refers to “whether the means of measurement are accurate and whether they are actually measuring what they are intended to measure”.

Hernon and Schwartz (2009:73) have listed three ways to estimate reliability:

- Internal consistency, where researchers write a few sets of questions that measure the same concept. Then, after collecting responses, they might use correlation between both groups of questions to determine whether the instrument reliably measures the concept. Cronbach’s alpha could be used to compute the correlation values.
- Pretest, where researchers might ask some individuals not appearing in the actual study to review the wording on the questions and ensure their meanings are well understood.
- Test and re-test, in this case, the researchers want to determine whether similar results are obtained when the same participants respond to the same test a second time and nothing has been done between testing that would affect their knowledge, learning or skills.

In qualitative research, the main issues of concern under reliability and validity relate to credibility, transferability, dependability, and conformity (Hernon & Schwartz, 2009; Golafshani, 2003; Lincoln & Guba, 1985). Credibility implies internal validity (whether the instrument measures what it is purported to measure or whether the research has the correct or best interpretation of findings and whether other factors, variables, or conditions have been considered or acknowledged), transferability is external validity (the application of research findings to another setting), dependability implies replication and reliability of data, while conformity refers to objectivity of the researcher (Hernon & Schwartz, 2009). Golafshani (2003:602) argued that reliability and validity cannot be viewed as contextualised largely in quantitative research and that there is now a strong consensus of the need for “some kind of qualifying check” in qualitative research. Consequently, to eliminate bias and entrench this “qualifying check”, reliability and validity are usually “conceptualized as trustworthiness, rigour, quality in qualitative paradigms” (Golafshani, 2003:604). This means robustness or rigour is core to the quality of qualitative research process. It has thus been contended that one way to achieve reliability and validity in qualitative research is through

methodological triangulation. This involves checking for consistency of findings generated by different data collection methods (Golafshani, 2003; Fidel, 2008).

2.8 Basics on Data Processing and Analysis

Data analysis is a key aspect of any research that helps in drawing conclusions and generalisations of findings to a problem statement. Data analysis refers to how data collected from the field is classified and interpreted. It involves recording, coding and methods for analysing data. Ajifurike (2002) asserts that, quantitative data analysis uses statistical technique for collecting, organising, analysing and interpreting. Usually quantitative data is analysed by different statistical methods and with the help of different statistical packages such as SPSS, STATA.

According to Kombo and Tromp (2006), analysing quantitative data varies from simple descriptive analysis to more elaborate reduction and multivariate associating techniques. On the other hand, qualitative data analysis refers to the way in which data is collected using interviews, observation, documentary and open-ended questionnaires are analysed. Several qualitative data analysis techniques may be used. Some of these include:

- A quick impression summary, for example, summarising key findings, explanations, interpretation and drawing conclusions;
- Thematic analysis, which involves analysing data according to research questions (themes); and
- Content analysis, which involves examining the intensity of certain words used to describe the form or content of spoken or written materials during data collection.

In many studies quantitative data were collected and analysed to produce a set of descriptive results; and qualitative data were collected and analysed for another set of thematic results. In other instance to deepen the interpretation of results, the two sets of results are usually compared and contrasted to produce a single interpretation and then conclusions drawn.

Practical Self Test Exercise

- 1) Explain the main contending paradigms in research
- 2) What would say id the role of literature review?
- 3) What the various methods that can be used to collect data in the field?
- 4) Explain how you would analyse qualitative and quantitative data you have collected as a researcher.
- 5) How can a researcher ensure validity and reliability in research?
- 6) What ethical considerations should a trade union researcher take into account when conducting research?

2.9 Basics on Report Writing

Reports communicate information which has been compiled as a result of research and analysis of data and of issues. Reports can cover a wide range of topics, but usually focus on transmitting information with a clear purpose, to a specific audience. Good reports are documents that are accurate, objective and complete. They should also be well-written, clearly structured and expressed in a way that holds the reader's attention and meets their expectations. The true value of the research may be assessed through a report since the written report may be the only tangible product of hundreds of hours of work.

Rightly or wrongly, the quality and worth of that work are judged by the quality of the written report - its clarity, organization and content.

Often reports are structured in a way that reflects the information finding process and the writing up of the findings: that is, summary of the contents, introduction or background, methods, results, discussion, conclusion and/or recommendations. The inclusion of recommendations is one reason why reports are a common form of writing in industry, as the informed recommendations are useful for decision making.

The scope and style of reports varies widely. It depends on three key factors: the report's intended audience, the report's purpose and the type of information to be communicated; for example, technical reports communicate technical information, so the degree of technicality in the report will depend on the reader's familiarity and understanding of technical concepts.

There are different types of reports that include:

- ✓ *Technical* and *Business* disciplines with an applied focus such as Engineering, Information Technology, Commerce, Accounting and Finance, will set report writing assignments that simulate the process of report writing in industry. Assignments are set in the form of a problem or a case study. The students research the problem, and present the results of the research in a report format to an imaginary client.
- ✓ *Scientific reports* (also called laboratory reports) are another kind of report. They are common in all the Sciences and Social Sciences. These reports use a standard scientific report format describing methods, results and conclusions to report upon an empirical investigation. A more detailed and extensive type of this report is the research project report for students involved in postgraduate studies.
- ✓ *Field reports* are common in disciplines such as Law, Industrial Relations, Psychology, Nursing, History and Education. These types of reports require the one to analyse his or her observations of phenomena or events in the real world in light of theories. Most trade unions produce such reports.

2.9.1 Planning Report Writing

The planning stage of report writing is the most time-consuming. If the report is not properly planned, you can waste valuable time and risk producing a report that does not meet your objectives. The following steps are a suggested set of guidelines for effectively planning your report.

Step 1: *Define the problem and the purpose of the report*

Step 2: *Define the audience*

Step 3: *Determine the Ideas to Include*

Step 4: *Collect the Information*

Step 5: *Sort and Evaluate the Information*

Step 6: *Organise the Information*

Step 7: *Prepare the Outline*

Step 1: Define the problem and the purpose of the report

It is important to analyse the problem and define your purpose. It is useful at this stage to ask yourself questions such as the following:

- ✓ What will the report investigate?
- ✓ What is the scope of your investigation?
- ✓ What are the limitations of your investigation?
- ✓ What method will you use to conduct your

Step 2: Define the audience

At university, it is relatively easy to define your audience: it is your lecturer or tutor, the marker of your work. In the workplace this process may require further analysis and will impact on the scope and style of your report in terms of issues such as degree of technicality required.

Step 3: Determine the ideas to include

It is important to establish the ideas or topics you need to address. Make a list of all the potential topics or sections of the report. From these, you can draw up a preliminary outline of headings. This step will greatly assist in collecting the information you need to write the report.

Step 4: Collect the information

After having identified the issues and topics, you need to locate the research and information needed. There are two main categories of information used in report writing: primary (interviews with people, conversations etc) and secondary (published materials, previous reports, and statistics). Make sure that your sources are reliable.

Step 5: Sort and Evaluate the Information

Once you have gathered your information, review your material. As you review, highlight key terms and ideas that relate to the purpose of the report. This highlighted material may make up the findings section of the report. Place these in a file and put any irrelevant material into a background file.

Don't discard any information until the report is complete: circumstances can change and you will save time if you need to make any major changes, or the purpose of the report changes.

Step 6: Organise the information

Going back to the preliminary headings you drew up; begin to sort your information under these headings if they are still appropriate. This step is very important because you must ensure that you have a suitable structure or outline of the report. Keep the big picture in mind:

- ✓ How do the ideas link together?
- ✓ Are there any gaps in the information?
- ✓ What headings/issues are the most important, and what sub-headings might come under them?

You may need to revise your headings/outline during this process and add new topics or remove redundant or irrelevant ones. Categorise your information under the headings and then plan sub-headings. Having done this, ensure that your sequence of heading and sub-heading is logical and appropriate.

Step 7: Prepare the outline

There are different ways to provide a logical order of information:

- ✓ chronological sequence
- ✓ order of importance: most important to least important and vice versa
- ✓ deductive order: from the general to the specific
- ✓ inductive order: from the specific to the general
- ✓ problem solving order
- ✓ scientific report structure/order

The order of the information in the report is closely linked with the purpose of the report, so the above are merely generic suggestions.

2.9.2 Development of a Research Proposal: Some General Directives

In the development of a research proposal the following are key steps:

1. Know yourself: Know your area of expertise, what your strengths are and what your weaknesses are. Play to your strengths, not to your weaknesses. Do not assume that, because you do not understand an area, no one understands it or that there has been no previous research conducted in the area. If you want to

get into a new area of research, learn something about the area before you write a proposal.

2. *Know the program from which you seek support:* Never submit a proposal to a program if you are not certain that it is the correct program to support your area of research. Proposals submitted inappropriately to programs may be returned without review, transferred to other programs where they are likely to be declined, or simply trashed in the program to which you submit. In any case, you have wasted your time writing a proposal that has no chance of success from the get-go.

3. *Read the program announcement:* Programs and special activities have specific goals and specific requirements. If you do not meet those goals and requirements, you have thrown out your chance of success. Read the announcement for what it says, not for what you want it to say. If your research does not fit easily within the scope of the topic areas outlined, your chance of success is nil.

4. *Formulate an appropriate research objective:* A research proposal is a proposal to conduct research, not to conduct development or design or some other activity. Research is a methodical process of building upon previous knowledge to derive or discover new knowledge, that is, something that isn't known before the research is conducted. In formulating a research objective, be sure that it hasn't been proven impossible (for example, "my research objective is to find a geometric construction to trisect an angle"), that it is doable within a reasonable budget and in a reasonable time, that you can do it, and that it is research, not development.

5. *Develop a viable research plan:* A viable research plan is a plan to accomplish your research objective that has a non-zero probability of success. The focus of the plan must be to accomplish the research objective. In some cases, it is appropriate to validate your results. In such cases, a valid validation plan should be part of your research plan. If there are potential difficulties lurking in your plan, do not hide from them, but make them clear and, if possible, suggest alternative approaches to achieving your objective. A good research plan lays out step-by-step the approach to accomplishment of the research objective. It does not gloss over difficult areas with statements like, "We will use computers to accomplish this solution."

6. State your research objective clearly in your proposal: A good research proposal includes a clear statement of the research objective. Early in the proposal is better than later in the proposal. The first sentence of the proposal is a good place. A good first sentence might be, “The research objective of this proposal is...” Do not use the word “develop” in the statement of your research objective. It is, after all, supposed to be a research objective, not a development objective. Many proposals include no statement of the research objective whatsoever. The vast majority of these are not funded. Remember that a research proposal is not a research paper. Do not spend the first 10 pages building up suspense over what is the research objective.

7. Frame your project around the work of others: Remember that research builds on the extant knowledge base, that is, upon the work of others. Be sure to frame your project appropriately, acknowledging the current limits of knowledge and making clear your contribution to the extension of these limits. Be sure that you include references to the extant work of others. Proposals that include references only to the work of the principle investigator stand a negligible probability of success. Also frame your project in terms of its broader impact to the field and to society. Describe the benefit to society if your project is successful. A good statement is, “If successful, the benefits of this research will be...”

8. Grammar and spelling count: Proposals are not graded on grammar. But if the grammar is not perfect, the result is ambiguities left to the reviewer to resolve. Ambiguities make the proposal difficult to read and often impossible to understand, and often result in low ratings. Be sure your grammar is perfect. Also be sure every word is correctly spelled. If the word you want to use is not in the spell checker, consider carefully its use. Not in the spell checker usually means that most people won’t understand it. With only very special exceptions, it is not advisable to use words that are not in the spell checker. Reviewers used to say, “He’s just an engineer. Don’t mind the fact that he can’t spell.” Now they say, “He’s proposing to do complex computer modeling, but he doesn’t know how to use the spell checker...”

9. Format and brevity are important: Do not feel that your proposal is rated based on its weight. Do not do your best to be as verbose as possible, to cover every conceivable detail, to use the smallest permissible fonts, and to get the

absolute most out of each sheet of paper. Reviewers hate being challenged to read densely prepared text or to read obtusely prepared matter. Use 12-point fonts, use easily legible fonts, and use generous margins. Make your proposal a pleasant reading experience that puts important concepts up front and makes them clear. Use figures appropriately to make and clarify points, but not as filler. Remember, you are writing this proposal to the reviewers, not to yourself. Remember that exceeding page limits or other format criteria, even marginally, can disqualify your proposal from consideration.

10. *Know the review process:* Know how your proposal will be reviewed before you write it. Proposals that are reviewed by panels must be written to a broader audience than proposals that will be reviewed by mail. Mail review can seek out reviewers with very specific expertise in very narrow disciplines. This is not possible in panels. Know approximately how many proposals will be reviewed with yours and plan not to overburden the reviewers with minutia. Keep in mind that, the more proposals a panel considers, the more difficult it will be for panelists to remember specific details of your proposal. Remember, the main objective here is to write your proposal to get it through the review process successfully. It is not the objective of your proposal to brag about yourself or your research, nor is it the objective to seek to publish your proposal. Again, your proposal is a proposal; it is not a research paper.

11. *Proof read your proposal before it is sent:* Many proposals are sent out with mistakes, omissions, and errors of all sorts. Proposals have been submitted with the list of references omitted and with the references not referred to. Proposals have been submitted to the wrong program. Proposals have been submitted with misspellings in the title. These proposals were not successful. Stupid things like this kill a proposal. It is easy to catch them with a simple, but careful, proof reading. Don't spend six or eight weeks writing a proposal just to kill it with mistakes that are easily prevented.

12. *Submit your proposal on time:* Why work for two months on a proposal just to have it disqualified for being late? Remember, fairness dictates that proposal submission rules must apply to everyone. It is not up to the discretion of the program officer to grant you dispensation on deadlines. That would be unfair to everyone else, and it could invalidate the entire competition. Equipment failures, power outages, hurricanes and tornadoes, and even internal problems

at your institution are not valid excuses. Get your proposal in two or three days before the deadline.

These twelve steps are nothing more than common sense. They are so obvious that they hardly bear mention. What is more, they are all necessary conditions. If you fail on any one of these steps, you will reduce your chance of success to practically nothing. Think about it. If you were a reviewer, would you recommend for funding a proposal that does not meet these criteria? So why then do fully half the proposals submitted flagrantly omit them? It's a fact. Most proposals do not follow these simple steps for success. Therein lays your opportunity. If you take the time to follow these steps, your proposal will be that much better by comparison, and you will vastly increase your chance of success. There is a dark side and a bright side to this.

On the dark side, it is not easy to write a good proposal. It takes time and effort to assure that all the above steps are met. Indeed, it can take several months to prepare a good proposal. But, on the bright side, if you do take the time to write good proposals, you will have a much higher success rate, and overall you will spend a much smaller fraction of your life writing proposals. Taking the time to do it right really pays off. There are two more things that you can do to vastly improve your prospects for success as a researcher.

First, you have to know yourself as well as you can.

- ✓ Who are you?
- ✓ Where are you going?
- ✓ Where do you want to go
- ✓ Where are you today?
- ✓ Where do you want to be in five years, ten years, and twenty years?

Then create a roadmap of how to get from where you are to where you want to be in the future. The focus of this roadmap should be the things over which you have control, and it should acknowledge the things over which you have no control. If you can't write such a plan, then your goals for the future are not realistic. You can revise the plan as often as you wish. But the fact that the plan exists will influence your proposal in a very positive way, as it will place the research project you propose into the broad context of your life plan.

Practical Self Test Exercise

- 1) What is report writing?
- 2) Discuss the steps you would follow in report writing?
- 3) What are the key things you should take into account when writing a project proposal for funding?

MODULE THREE: STATISTICS FOR TRADE UNION ACTION

In this module we deal with the role of statistics in trade union research. The section covers the following:

- Concept and Role of Statistics
- Types and sources of data
- Data collection and analysis
- Data presentation and Interpretation
- Curves and diagrams
- Measures of central tendency
- Measures of dispersion
- Index numbers
- Practical exercises

3.1 Concept and Role of Statistics

Statistics, as a word, connotes at least two meanings: (i) numerical data expressed in quantitative terms, and (ii) techniques used to analyse data. Formally, statistics is **the science concerned with gathering, analysing and interpreting data for decision-making**. Data can simply be defined as the **numerical facts or any materials that serve as a basis for drawing conclusions**. The role of statistics is to facilitate decision-making and informed action. It does this through various ways. For instance: by providing methods of bringing out the latent characteristics present in a set of numerical data and by providing methods for drawing inferences, or making broad generalisations. Statistics plays a significant role in such areas as planning, business forecasting, collective bargaining negotiations, time series analysis, and regression & correlation analysis.

Statistical methods involved in data analysis are divided into two categories,

- ✓ descriptive statistics, and
- ✓ Inferential statistics.

Descriptive statistics deals with collecting, summarizing and simplifying data, presenting it in a convenient, usable and understandable form, often displaying it in tables or diagrams to illustrate the main features. **Inferential statistics** goes beyond mere descriptions to methods used to draw conclusions & make broader generalizations about the population. Obtaining a particular value from the sample information and using it for drawing an inference about the entire population underlies the subject matter of inferential statistics. One consideration when employing inferential methods is that it is contingent upon the correct methodological framework or sampling plan.

3.2 Types and Sources of Data

In statistics, data are classified into two broad categories: quantitative data and qualitative data. Quantitative data are those that can be quantified in definite units of measurement. In other words, this is data in numbers. Quantitative data can further be categorized as continuous or discrete data.

- ✓ **Continuous data** represent the numerical values of a continuous variable e.g. those of weight, length, height, thickness which represent continuous variables.
- ✓ **Discrete data** are values assumed by a discrete variable. Discrete variables are measured in fixed numbers. These essentially emanate from counting e.g. number of customers visiting a shop.

Qualitative data refers to qualitative characteristics of a subject or object. This is data in words. Data is qualitative in nature when its observations are defined and noted in terms of the presence of a certain attribute in discrete numbers. These data are further classified as nominal and rank data.

- **Nominal data** are the outcome of classification into two or more categories of items or units according to some quality characteristic e.g. classification of student according to sex (as males or females), of workers according to skill (as skilled, semi-skilled, unskilled). Measurement at the nominal level is, as the name implies, a naming or

labelling process. One uses names or labels to classify people, objects, or events as they exist in some context. Data obtained at this level represent a classification of some type and reflect a difference in kind rather than amount or degree. Further examples would include a classification of people according to their residential areas, tribes, gender status, political party affiliation, or religious preference. Researchers often attach a number to the names or classes established for nominally measured concepts, but it is important to keep in mind that the numbers are also just labels. Nominal measures serve the important function of letting one tell items apart, to discriminate between objects on a reliable basis. Take note that, nominal measurement is classification, and no ordering of the categories is permitted.

- **Rank data**, on the other hand, are the result of assigning ranks to specify order e.g. 1st 2nd 3rd. In many avenues of research it is possible not only to classify objects but, in addition, to order them in some manner, such as “more than” or “less than”. Thus, ordinal measurement is a ranking operation, such as first, second, third, fourth, fifth, and so on. Note that measurement at the ordinal level is simply order, and the differences between any one rank and another may not be equal, but simply more or less. Examples would include Military ranks known as private, major, colonel, or general – which are examples of nominal measurement and ordinal ranking. Numbers are often assigned to ranks, and this serves a useful purpose, but again, it is necessary to keep in mind that the numbers do not permit analysis as if the ranks had equal distance between them. Ordinal measurement retain all the power characteristics of nominal measurement (classification) and in addition, adds the property of order to the observation

The above data types and clarifications enable us to notice the following: That quantitative data (both continuous and discrete) possesses the characteristic of being numerically expressed to a marked degree of precision. They represent the values associated with the measurement of variables. Qualitative data (nominal and rank) refer to variables which do not give rise to numerical values in the same way as quantitative variables. These are the result of

observing a variable with respect to a certain quality characteristic or an attribute.

Being a subject of much practical utility and having wide-ranging applications, statistics displays a unique strength. It suffers from an important weakness as well. The greatest strength lies in developing a statistical mode of thinking, imparting an orientation to the mind to think statistically. Imagine what would happen if government didn't collect data on such characteristics of the state as education, occupation, sex, age, marital status as are necessary for effective planning! The weakness derives from the general feeling of distrust in it. This emanates from the general held view that the data, to which statistical methods are often applied, lack the desired element of accuracy. To the extent that this apprehension may be taken as based on factual situations, the real culprits are those who compile, collect, and project data in a given light.

Data sources could be seen as of two types, namely,

- Secondary
- Primary

A data source is **secondary** if it already contains the needed data in one form or other. A **primary** data source is invariably a sample or population survey undertaken solely with a view to collecting the needed data when the same are not available from an existing source. Thus, depending on this broad classification of possible data sources, statistical data may be distinguished as secondary data and primary data. Secondary data are secondary in the sense that they already exist in some form- published or unpublished-in an identifiable secondary source. Generally, they are available from published sources, though not necessarily in the form actually required. Primary data, on the contrary, are those that do not already exist in any form, and thus have to be collected for the first time from the primary source(s). By their very nature, these data require fresh and first-time collection covering the whole population or a sample drawn from it.

The issues confronted in the collection of secondary data are not many. The task is relatively simple. It involves the following:

- ✓ Identifying the sources of data, various publications where the required data may be found available.
- ✓ Examining the available data, if these satisfy the needs of the proposed research investigation.

- ✓ Compiling and re-organising the available data in the manner necessary for the investigation at hand.

To properly answer each of these concerns, it is important to be adequately clear about the objectives of the investigation. Because it is the objective of your research that is going to help identify actual data requirements: whether the existing data will suffice or you will require some kind of compilation and/or reorganisation in any form. Once the data requirements of a given research are clearly identified, it then becomes important to locate and reach relevant data sources.

Secondary data should be used with abundant caution and care, however. They may not be available in the form required and their classification and tabulation may be limited, especially those of a specific-purpose secondary data. However, they offer unique advantages;

- ✓ Generally easy availability
- ✓ Convenient to reach and access
- ✓ Less costly in terms of collection
- ✓ Time required in collection/compilation not long

Two major issues which call for thoughtful decision in the collection of primary data, relate to choosing the right type of sampling method to identify the respondents and selecting an appropriate technique to use for the data collection. Issues relating to sampling have been discussed separately in an earlier module on research. Suffice to say no survey whether population or sample, can be undertaken without due consideration of cost, time and effort involved in data collection, and the reliability of data generated.

3.3 Data Collection and Analysis

Collection of data is the first important step with which statistics start. Once the data has been collected it has to be organised in a systematic manner for it to make sense. This process is known as data analysis. The task of data collection covers both secondary and primary data. More formally, data collection is the act of assembling & gathering the needed numerical information in the context of a specified research investigation. Given the objectives and research design of the investigation, the data required for investigation may be secondary or primary. Collection is involved in one form or the other in the case of both. However, as discussed in the previous unit,

the issues involved in collecting secondary data are different from those concerning primary data.

A technique of data collection refers to the method by which we actually go about collecting the desired information in a survey. As information is always elicited from the respondents, three alternative techniques of statistical data collection have come to be adopted:

- Personal interviews
- Telephone interviews
- Questionnaire

Remember that no survey based primary data offer adequately reliable results unless the research investigation at hand is properly conceived, effectively designed, and meticulously implemented .Preparing survey instruments and getting them answered require serious thought and imagination. Otherwise, the data collected may lack the needed reliability to an extent that seriously impairs the worth of the inferences that may be drawn.

3.4 Data Presentation and Interpretation

The foremost business after data collection is to present them in a meaningful way. It means systematically arranging the raw data and abridging them in a convenient and easy-to understand form. Data presentation is basically an exercise in ordering and smarting data with a view to revealing and highlighting the latent characteristics. Thus, when presenting your data ensure that the data:

- becomes manageable
- appear more meaningful
- offer more useful interpretations
- reveal more clearly the broad trends in data variations

Broadly, there are two forms of data presentation: Tabular and graphic. Tabular presentation means tabulating the data in the form of appropriate tables. The basic function of the table is to simplify data and to present it in a manner that facilitates comparison Simplifying data means that the information desired become easy to locate Comparison involves bringing all

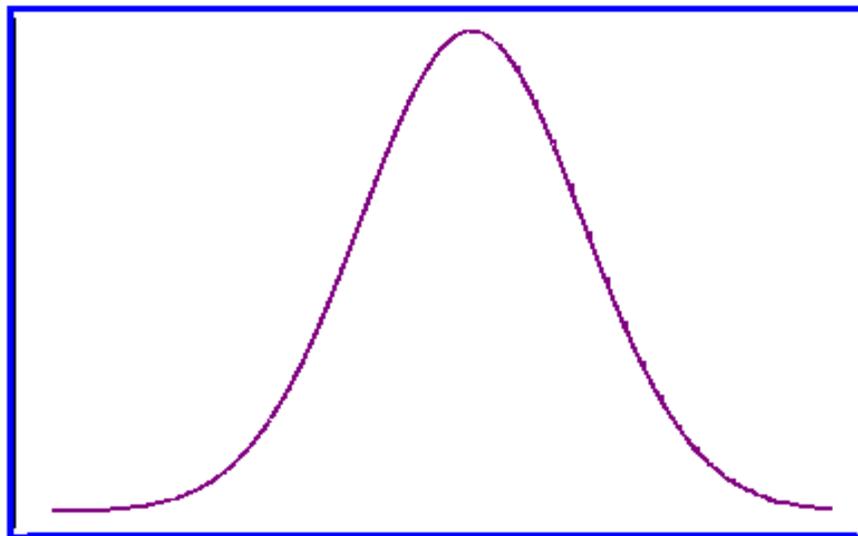
related data together at one place such that a relational picture can be conveniently and efficiently drawn.

3.5 Curves and Diagrams

Graphic presentation means displaying tabular data visually, often in the form of various graphs. More popularly used graphs:

Normal Distribution Curves

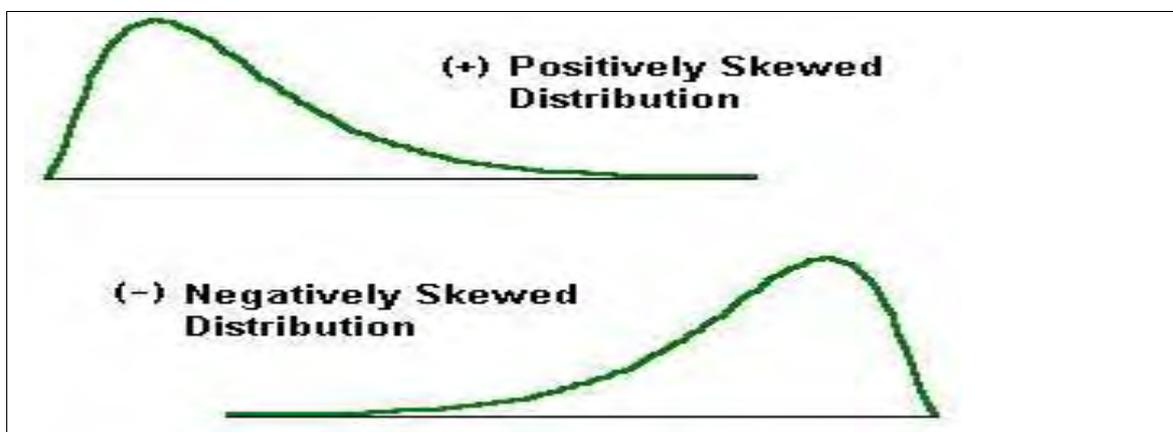
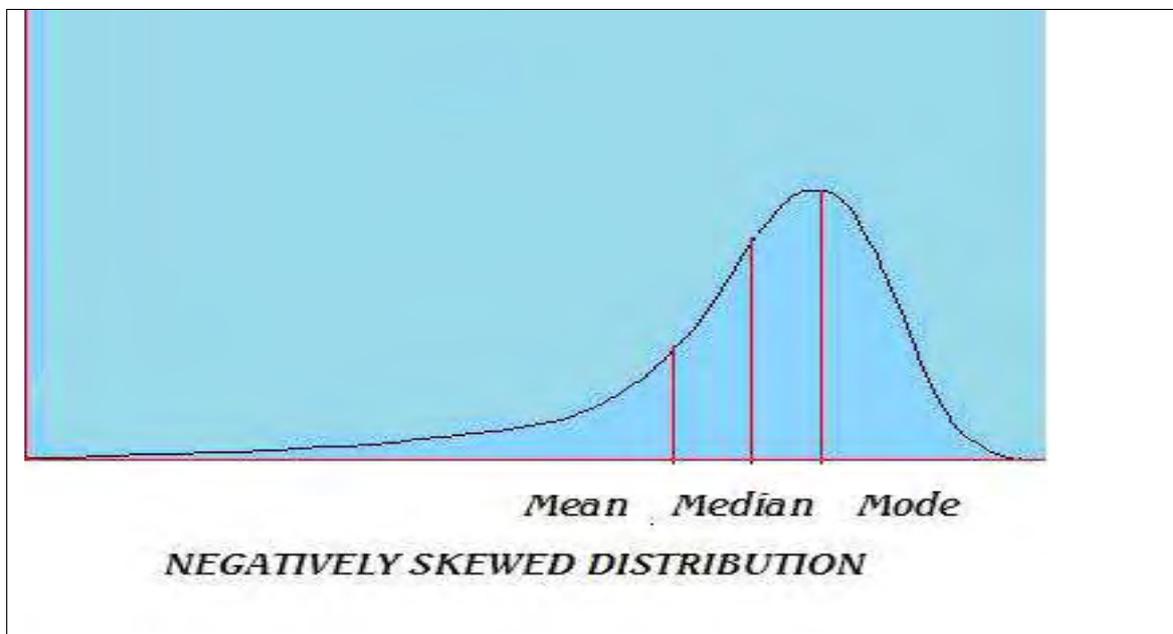
This is the most common distribution curve, familiar to nearly all. It deals with many random events over time. It is typified by a small number of occurrences on the extreme right or left of the curve, with the bulk of occurrences happening in the middle. It looks like a big heap. Mathematically, the mean and median are the same. In fact, the closer to median and mean are to each other, the more of a normal curve you have. Random associations will create this curve over time with a large enough sample size. If one is comparing ages (on the y, or vertical axis) to the preference of the colour green (x, or the horizontal axis), then it is likely a normal curve will result.



Skewed Distribution Curve

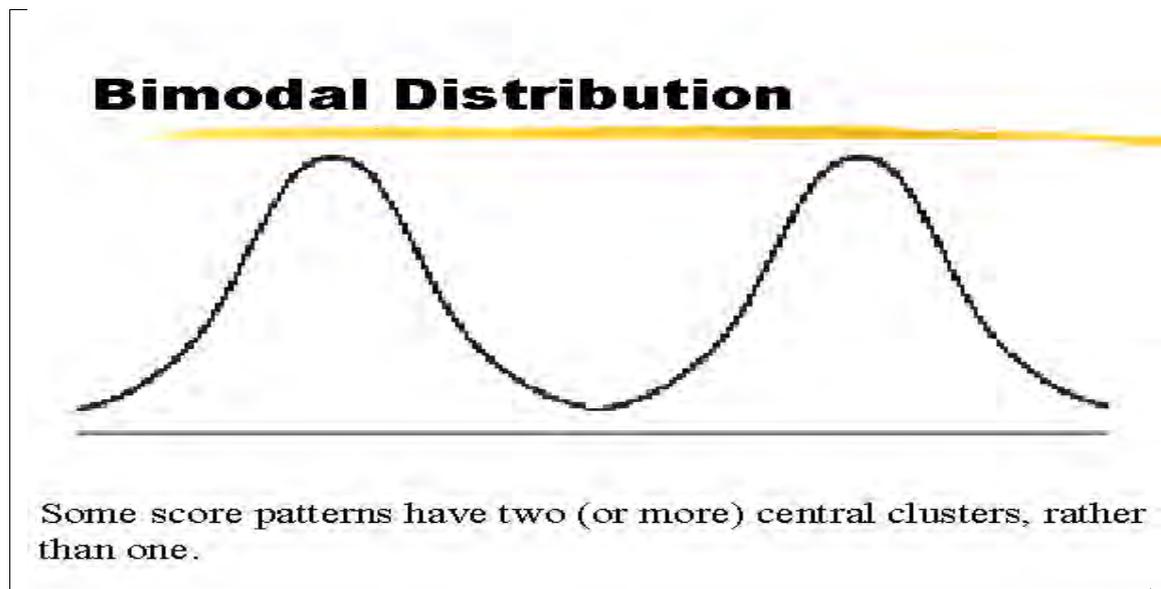
Something about the causal variable is forcing a spike in the "after" section. In this case, the occurrences are bunched to one side or another. The mean and

median are different from one another. For example, if you are comparing ages (y) to an interest in finance, (x), then a skewed curve will result, since very few young people or teenagers are interested in finance. The curve will suddenly spike upwards at maybe 19-30, when these issues are becoming important. Another example is the comparison of age (y) to an interest in social security. The graph will spike tremendously at probably between ages 40 and 50, with a flat line (no interest) from toddler-hood through the 40s. Skewed distribution occurs when there is a specific variable that changes with the other at certain times. If a random set of events creates a skewed curve, then either your sample is not large enough or the events are not random after all.



Bi-Modal Distribution Curves

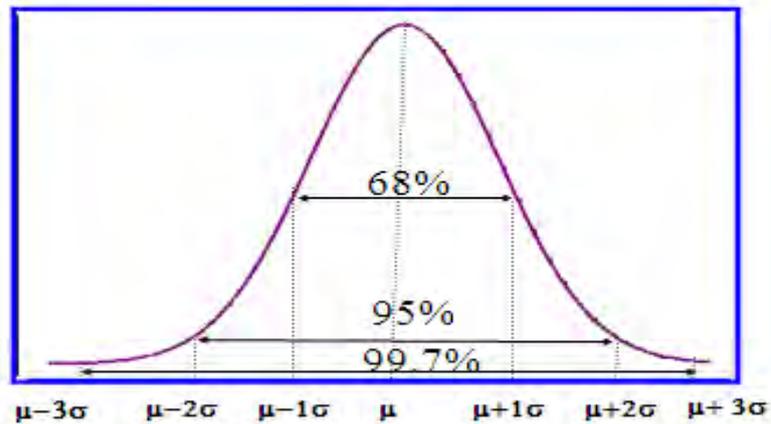
This curve looks like two camel humps. There are two large spikes with flat lines in the middle, and often at the beginning and end. Here, there are two means. Keeping to our example, if the y axis is about age, then an x axis variable that would likely create a bi-modal curve might be the need for guidance. In the normal human life, there are generally two age groups where people seek guidance from family members or caretakers. These are the very young and the very old. Therefore, when we graph the occurrences of people who really need adult guidance, it will look bi-modal, with a large spike at the young years and another one at the older years.



Empirical Rule: For any symmetrical, bell-shaped distribution:

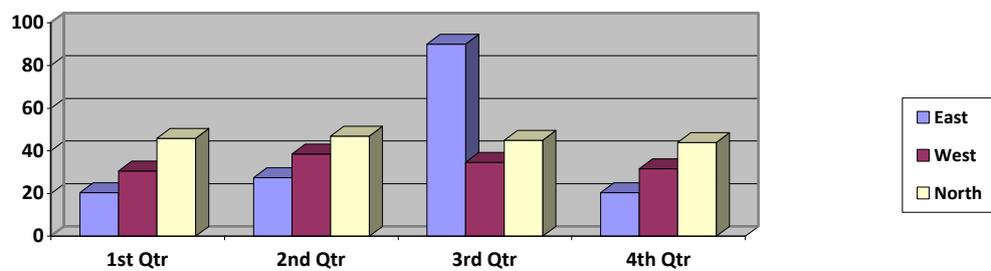
- About 68% of the observations will lie within $1s$ of the mean
- About 95% of the observations will lie within $2s$ of the mean
- Virtually all the observations will be within $3s$ of the mean

Bell - Shaped Curve showing the relationship between σ and μ .

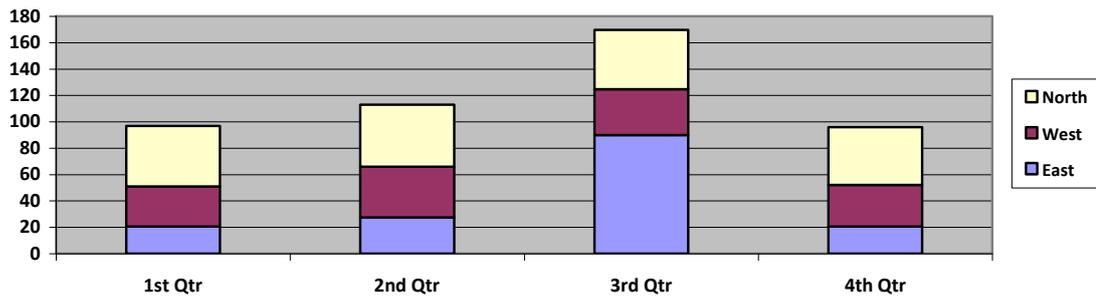


Simple bar chart:

Figures one wishes to compare are represented by bars. The height of the length of a bar is proportional to the size of the figure being illustrated. Bar charts can be vertical or horizontal

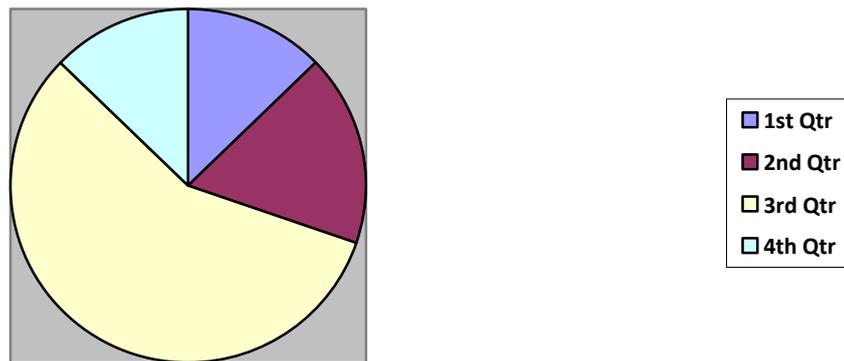


Component bar chart: These are a special form of bar charts. These charts are meant to exhibit the changes in the component or parts of a given total in relative terms



Pie chart

Pie charts are basically circle charts, which are usually drawn for component wise percent data. As the sum of angles in circle is 360 degrees, all percent components should be converted into angles first. Since all percent components add to 100, the corresponding component angles are computed by multiplying each component percent by the constant factor $360/100 = 3.6$. Component angles are shown in the circle from 12 o'clock position, assuming the circle is a time clock. Moving clock wise from the starting point, the largest angle is displayed first, followed by the second and so on, in descending order. Each angle is depicted by using different shading or colour. What each colour mean is explained is explained in the margin of the pie chart.



Practical Self Test Exercise

1. Define statistics as a discipline. Also bring out its scope.
2. Differentiate between descriptive and inferential statistics.
3. State the various factors determining the classification of data.
4. Define a continuous and a discrete variable. Give suitable examples to show the difference between the two.
5. Differentiate between nominal and ordinal data by citing suitable examples.
6. Justify that all qualitative data are essentially discrete data.
7. Evaluate statistics as a subject in terms of its basic strength and weakness.
8. What are the causes of mistrust in statistics? Is it really well-based?
9. Explain by citing examples primary and secondary sources of data.
10. Spell out the issues involved in the collection of secondary data.
11. Write short notes on (a) cautions in using secondary data, and (b) merits and demerits of using secondary data.
12. What are the advantages and disadvantages of using primary sources of data?

3.6 Measures of Central Tendency

The **Arithmetic Mean** is the most widely used measure of location and shows the central value of the data. It is calculated by summing the values and dividing by the number of values. The major characteristics of the mean are:

- 1) It requires the interval scale.
- 2) All values are used.
- 3) It is unique.
- 4) The sum of the deviations from the mean is 0.

For ungrouped data, the Population Mean is the sum of all the population values divided by the total number of population values:

$$\mu = \frac{\sum X}{N}$$

where

- μ is the population mean
- N is the total number of observations.
- X is a particular value.
- Σ indicates the operation of adding.

Example: ABC Company Limited owns four cars. The following is the current mileage on each of the four cars: 56,000, 42,000; 23,000; 73,000. Find the mean mileage for the cars.

Solution

$$\mu = \frac{\sum X}{N} = \frac{56,000 + \dots + 73,000}{4} = 48,500$$

Any measurable characteristic of the population is called a **parameter**. The mean of the population is an example of a parameter. For ungrouped data, the **Sample Mean** is the sum of all the sample values divided by the number of sample values:

$$\bar{X} = \frac{\sum X}{n}$$

Where n is the total number of values in the sample.

Example: A sample of five chief executives received the following bonus last year (\$000): 14.0, 15.0, 17.0, 16.0, 15.0. What is the arithmetic mean bonus received?

Solution

$$\bar{X} = \frac{\Sigma X}{n} = \frac{14.0 + \dots + 15.0}{5} = \frac{77}{5} = 15.4$$

Properties of the Arithmetic Mean

1. Every set of interval-level and ratio-level data has a mean.
2. All the values are included in computing the mean.
3. A set of data has a unique mean (not multiple ones).
4. The mean is affected by unusually large or small data values.
5. The arithmetic mean is the only measure of location where the sum of the deviations of each value from the mean is zero.

Consider the set of values: 3, 8, and 4. The **mean** is 5. Illustrating the fifth property

$$\Sigma(X - \bar{X}) = (3 - 5) + (8 - 5) + (4 - 5) = 0$$

Weighted Mean

The Weighted Mean of a set of numbers X_1, X_2, \dots, X_n , with corresponding weights w_1, w_2, \dots, w_n , is computed from the following formula:

$$\bar{X}_w = \frac{(w_1 X_1 + w_2 X_2 + \dots + w_n X_n)}{(w_1 + w_2 + \dots + w_n)}$$

Example: The City Construction Company pays its hourly employees \$16.50, \$19.00, or \$25.00 per hour. There are 26 hourly employees, 14 of which are paid at the \$16.50 rate, 10 at the \$19.00 rate, and 2 at the \$25.00 rate. What is the mean hourly rate paid the 26 employees?

Solution

$$\begin{aligned} \bar{X}_w &= \frac{14(\$16.50) + 10(\$19.00) + 2(\$25.00)}{14 + 10 + 2} \\ &= \frac{\$471.00}{26} = \$18.12 \end{aligned}$$

Median

The Median is the midpoint of the values after they have been ordered from the smallest to the largest. There are as many values above the median as below it in the data array. For an even set of values, the median will be the arithmetic average of the two middle numbers and is found at the $(n+1)/2$ ranked observation. Furthermore, for an even set of values, the median is not necessarily a value in the characteristic being measured.

Example: The years of service for a sample of five PanAfric workers are: 21, 25, 19, 20, 22. What is the median year of service?

Solution: Arranging the data in ascending order gives:

19, 20, 21, 22, 25.

Thus, the median is **21**.

Example: The heights of four trade union researchers, in inches, are: 76, 73, 80, 75. What is the median height of trade union researchers?

Solution: Arranging the data in ascending order gives: 73, 75, 76, 80. Thus, the median is 75.5.

The median is found at the $(n+1)/2 = (4+1)/2 = 2.5^{\text{th}}$ data point.

Properties of the Median

- There is a unique median for each data set.
- It is not affected by extremely large or small values and is therefore a valuable measure of location when such values occur.
- It can be computed for ratio-level, interval-level, and ordinal-level data.

Mode

The **Mode** is another measure of location and represents the value of the observation that appears most frequently.

Example: The exam scores for ten students are: 81, 93, 84, 75, 68, 87, 81, 75, 81, 87. Because the score of 81 occurs the most often, it is the mode

Data can have more than one mode. If it has two modes, it is referred to as bimodal, three modes, trimodal, and the like.

Geometric mean

The Geometric Mean (*GM*) of a set of n numbers is defined as the n^{th} root of the product of the n numbers. The formula is:

$$GM = \sqrt[n]{(X_1)(X_2)(X_3)\dots(X_n)}$$

The geometric mean is used to average percents, indexes, and relatives.

Example: A trade union secures a three year collective bargaining agreement with the following annual wage increases 5, 21, and 4 percent, in year 1, year 2 and year 3, respectively.

The arithmetic mean is $(5+21+4)/3 = 10.0$.

The geometric mean is

$$GM = \sqrt[3]{(5)(21)(4)} = 7.49$$

The *GM* gives a more conservative wage increase figure because it is not heavily weighted by the rate of 21 percent. The arithmetic mean overstates the true rate of the wage increase over the three year period.

A geometric mean, unlike an arithmetic mean, tends to dampen the effect of very high or low values, which might bias the mean if a straight average (arithmetic mean) were calculated.

Other Uses of Geometric Means

Geometric means are also used in financial reporting. This is because when evaluating investment returns as annual percent change data over several years (or fluctuating interest rates); it is the geometric mean, not the arithmetic mean, that tells you what the average financial rate of return would have had to have been over the entire investment period to achieve the end result. This term is also called the Compound Annual Growth Rate or CAGR.

For financial investment return calculations, the geometric mean is calculated on the decimal multiplier equivalent values, not percent values (i.e., a 6% increase becomes 1.06; a 3% decline is transformed to 0.97. The equation is also flipped around when calculating the financial rate of return if you know the starting value, end value, and the time period. This equation is used in these cases when the average rate of return is needed (or population growth rate):

$$\text{Return} = \sqrt[\text{Years}]{(\text{Finalvalue}/\text{origvalue})}$$

Note: If you subtract 1 from the equation above, this is your compound interest rate. To use this equation, if years=5, this is the "fifth root", which is the same as raising to the power of 1/5 or 0.2).

Example: The total number of unemployed school leavers in country Z's labour market increased from 755,000 in 1992 to 835,000 in 2000. What is the average annual percentage increase?

Solution: There are 8 years between 1992 and 2000, so n=8, therefore the later formula for GM can be applied.

That is, the geometric mean rate of increase is 1.27%.

$$GM = \sqrt[8]{\frac{835,000}{755,000}} - 1 = .0127$$

3.8 Practical Exercise

1. The Ubuntu healthcare system employs 200 persons on the nursing staff. Fifty are nurses' aides, 50 are practical nurses, and 100 are registered nurses. Nurses' aides receive \$8 an hour, practical nurses \$15 an hour, and registered nurses \$24 an hour. What is the weighted mean hourly rate?

2. The unemployment rate in country Z by month is given in the table below:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
8.7	8.8	8.7	7.8	7.3	7.8	6.5	6.5	6.5	6.8	7.3	7.6

- What is the arithmetic mean of country Z's unemployment rate?
- Find the median and mode of the unemployment rates
- Compute the arithmetic mean and median of the rainy season (Dec-Mar) months. Is it much different?

3. The consumer price index is reported monthly by the central statistical office. It reports the change in prices for a market basket of goods from

one period to the other. The index for 2000 was 172.2. By 2009, it increased to 214.5. What was the geometric mean annual increase for the period?

4. You earn \$3,000 per month as a starting salary, and you are offered two different alternative pay raises. Which is better?

1. 10% this year, 20% next year
2. 15% this year, 15% next year
3. 20% this year, 10% next year
4. None of the above

The arithmetic mean of all BUT #4 is 15%, but is one better than the others?

5. If you earned \$30,000 dollars in 2000 and \$50,000 in 2010, what is your annual rate of increase over time?

3.7 Measures of dispersion

Dispersion refers to the spread or variability in the data. Measures of dispersion include the following: range, mean deviation, variance, and standard deviation.

Range = Largest value – Smallest value

- The range is affected by extreme values (large or small).
- It does not use all the variable information.
- It's probably the simplest measure of dispersion and also the easiest to calculate.

In Excel, you can calculate the range as follows:

$$= \text{Max} () - \text{Min} ()$$

Where the “()” contains the list of data, usually the start and end points on a column.

Example: The following represents the current year's Return on Equity of the 25 companies in an investor's portfolio.

-8.1	3.2	5.9	8.1	12.3
-5.1	4.1	6.3	9.2	13.3
-3.1	4.6	7.9	9.5	14.0
-1.4	4.8	7.9	9.7	15.0
1.2	5.7	8.0	10.3	22.1

Highest value: 22.1

Lowest value: -8.1

Range = Highest value – lowest value

$$= 22.1 - (-8.1)$$

= 30.2

Mean Deviation

The arithmetic mean of the absolute values of the deviations from the arithmetic mean.

$$M.D = \frac{\sum |X - \bar{X}|}{n}$$

The main features of the mean deviation are:

- All values are used in the calculation.
- It is not unduly influenced by large or small values.
- The absolute values are difficult to manipulate.

For frequency distribution, the mean deviation is given by

$$M.D = \frac{\sum f |X - \bar{X}|}{\sum f}$$

When the mean deviation is calculated about the median, the formula becomes

$$M.D \text{ (about median)} = \frac{\sum f |X - \text{Median}|}{\sum f}$$

The mean deviation about the mode is

$$M.D \text{ (about mode)} = \frac{\sum f |X - \text{Mode}|}{\sum f}$$

For a population data the mean deviation about the population mean μ is

$$M.D = \frac{\sum f |X - \mu|}{\sum f}$$

The mean deviation is a better measure of absolute dispersion than the range and the quartile deviation.

Example: Calculate the mean deviation from (1) arithmetic mean (2) median (3) mode in respect of the marks obtained by nine students given below and show that the mean deviation from median is minimum. Marks (out of 25): 7, 4, 10, 9, 15, 12, 7, 9, 7

Solution:

After arranging the observations in ascending order, we get marks: 4, 7, 7, 7, 9, 9, 10, 12, and 15

$$\text{Mean} = \frac{\sum X}{n} = \frac{80}{9} = 8.89$$

$$\begin{aligned} \text{Median} &= \text{Value of } \left(\frac{n+1}{2}\right)\text{th item} = \text{Value of } \left(\frac{9+1}{2}\right)\text{th item} \\ &= \text{Value of (5)th item} = 9 \end{aligned}$$

Mode = 7 (Since 7 is repeated maximum number of times)

Marks X	$ X - \bar{X} $	$ X - \text{Median} $	$ X - \text{Mode} $
4	4.89	5	3
7	1.89	2	0
7	1.89	2	0
7	1.89	2	0
9	0.11	0	2
9	0.11	0	2
10	1.11	1	3
12	3.11	3	5
15	6.11	6	8
Total	21.11	21	23

$$M.D \text{ from mean} = \frac{\sum |X - \bar{X}|}{n} = \frac{21.11}{9} = 2.35$$

$$M.D \text{ from median} = \frac{\sum |X - \text{Median}|}{n} = \frac{21}{9} = 2.33$$

$$M.D \text{ from mode} = \frac{\sum |X - \text{Mode}|}{n} = \frac{23}{9} = 2.56$$

From the above calculations, it is clear that the mean deviation from the median has the least value.

Example: Calculate the mean deviation from mean and its coefficients from the following data.

Size of Items	3-4	4-5	5-6	6-7	7-8	8-9	9-10
Frequency	3	7	22	60	85	32	8

Solution:

The necessary calculation is given below:

Size of Items	X	f	fX	$ X - \bar{X} $	$f X - \bar{X} $
3-4	3.5	3	10.5	3.59	10.77
4-5	4.5	7	31.5	2.59	18.13
5-6	5.5	22	121.0	1.59	34.98
6-7	6.5	60	390.0	0.59	35.40
7-8	7.5	85	637.5	0.41	34.85
8-9	8.5	32	272.0	1.41	45.12
9-10	9.5	8	76.0	2.41	19.28
Total		217	1538.5		198.53

$$\text{Mean} = \bar{X} = \frac{\sum fX}{\sum f} = \frac{1538.5}{217} = 7.09$$

$$\text{M.D from mean} = \frac{\sum |X - \bar{X}|}{n} = \frac{198.53}{217} = 0.915$$

Example: The weights of a sample of crates containing books for the bookstore (in kgs) are: 103, 97, 101, 106, 103. Find the mean deviation.

Solution: The mean deviation is:

$$\begin{aligned}
 MD &= \frac{\sum |X - \bar{X}|}{n} = \frac{|103 - 102| + \dots + |103 - 102|}{5} \\
 &= \frac{1 + 5 + 1 + 4 + 1}{5} = 2.4
 \end{aligned}$$

The variance and the closely-related standard deviation are measures of how spread out a distribution is. In other words, they are measures of variability. The variance is computed as the average squared deviation of each number

from its mean. For example, for the numbers 1, 2, and 3, the mean is 2 and the variance is:

$$\sigma^2 = \frac{(1-2)^2 + (2-2)^2 + (3-2)^2}{3} = 0.667$$

The formula in summation notation for the variance in a population is

$$\sigma^2 = \frac{\sum (X - \mu)^2}{N}$$

where μ is the mean and N is the number of scores. When the variance is computed in a sample, the statistic

$$S^2 = \frac{\sum (X - M)^2}{N}$$

(where M is the mean of the sample) can be used. S^2 is a biased estimate of σ^2 , however. By far the most common formula for computing variance in a sample is:

$$s^2 = \frac{\sum (X - M)^2}{N - 1}$$

which gives an unbiased estimate of σ^2 . Since samples are usually used to estimate parameters, s^2 is the most commonly used measure of variance. Calculating the variance is an important part of many statistical applications and analyses. It is the first step in calculating the standard deviation.

Standard Deviation

The standard deviation formula is very simple: it is the square root of the variance. It is the most commonly used measure of spread. An important attribute of the standard deviation as a measure of spread is that if the mean and standard deviation of a normal distribution are known, it is possible to compute the percentile rank associated with any given score. In a normal distribution, about 68% of the scores are within one standard deviation of the mean and about 95% of the scores are within two standard deviations of the mean. The standard deviation has proven to be an extremely useful measure

of spread in part because it is mathematically tractable. Many formulas in inferential statistics use the standard deviation.

Example: The hourly wages earned by a sample of five workers are: \$7, \$5, \$11, \$8, \$6. Find the sample variance and standard deviation.

Solution

$$\bar{X} = \frac{\sum X}{n} = \frac{37}{5} = 7.40$$

$$s^2 = \frac{\sum (X - \bar{X})^2}{n-1} = \frac{7^2 - 7.4^2 + \dots + 6^2 - 7.4^2}{5-1} = \frac{21.2}{5-1} = 5.30$$

$$s = \sqrt{s^2} = \sqrt{5.30} = 2.30$$

Which to choose???

	Salary	Raise	Salary after Raise	
Period 1	3000	1.1	3300	300
Period 2	3300	1.2	3696	660
				960
Period 1	3000	1.15	3450	450
Period 2	3450	1.15	3967.5	517.5
				967.5
Period 1	3000	1.2	3600	600
Period 2	3600	1.1	3960	360
				960

The only time the Geometric mean and the arithmetic mean are the same is when all the factors are the same.



Base		Average Raise	\$ Raise
\$	3,000.00	0.148912529	446.74
\$	3,446.74	0.148912529	513.26
			960.00

Just as a check. Yep, 15% is best.

MODULE FOUR: THE NATIONAL ECONOMY

In this module we discuss the following:

- National economy and the operators;
- Basic economic and social indicators;
- Main markets of the national economy;
- Essential problems of the labour market in Africa;
- Public Finances: the national budget and the review of public expenditure.

4.1 National Economy and Operators

An economy is an integrated system of production, distribution and consumption of goods and government. Together, their individual decisions determine the economy's total spending, income and output. Individuals are suppliers of factor inputs to firms and buyers of goods and services from firms. Firms are buyers of factor inputs from individuals and producers of goods and service. The interaction among these various economic units is represented as a circular flow (See Figure 4.1).

Figure 4.1: The Circular Flow



The circular flow captures the continuous movement of production, income, and factor payments between producers and consumers. The four components of this simple model are: household sector, business sector, product markets, and resource markets. The household sector at the far left contains the consuming population of the economy. The business sector at the far right includes all of the producers. The product markets at the top of the flow direct production from the business sector to the household sector in exchange for payment flowing in the opposite direction. The resource markets at the bottom of the flow direct factor services from the household sector to the business sector in exchange for payment flowing in the opposite direction.

The circular flow indicates that the income used by the household sector to purchase goods through the product markets is obtained by selling factor services through the resource markets. It also indicates that the revenue used by the business sector to pay for factor services obtained through the resource markets is generated by selling goods through the product markets. It is often convenient to combine the thousands of individual microeconomic product markets used to exchange a wide assortment of final goods and services throughout the economy into an abstract aggregation. Demand in the aggregate product market reflects the expenditures made by buyers in the individual markets. And supply in the aggregate product market reflects the total production sold in the individual markets.

Equilibrium in the aggregate product market is an essential aspect of macroeconomic analysis. In particular, overall macroeconomic equilibrium, which includes both short-run equilibrium and long-run equilibrium, requires aggregate product market equilibrium. This exists if total expenditures on gross domestic product are equal to the total amount of gross domestic product available.

However, this does not mean every individual product market is in equilibrium. One might have a bit of a shortage and another bit of a surplus. As long as the shortages and surpluses balance out, meaning aggregate production is equal to aggregate expenditures, then the aggregate product market is in equilibrium

4.2 Basic Economic and Social Indicators

Below we discuss some of the key basic economic and social indicators.

4.2.1 Gross Domestic Product (GDP)

GDP is defined as the market value of *all final* goods and services produced *domestically* in a single year and are the single most important measure of macroeconomic performance. A related measure of the economy's total output product is **gross national product (GNP)**, which is the market value of all final goods and services produced by a *nation* in a single year. **GDP or GNP?** The difference between GDP and GNP is rather technical. GDP includes only goods and services produced by a *nation's own citizens and firms*. Goods and services produced outside a nation's boundaries by the nation's own citizens and firms are *included in GNP but are excluded from GDP*. Goods and services produced within a nation's boundaries by foreign citizens and firms are *excluded from GNP but are included in GDP*. Typically, there is not much difference in the reported values of GDP and GNP; so one may use either statistic to measure overall macroeconomic activity. The rest of this section will therefore focus on GDP.

Measuring GDP: the expenditure and income approaches. There are two ways of measuring GDP, the expenditure approach and the income approach. The **expenditure approach** is to add up the market value of all domestic expenditures made on final goods and services in a single year. **Final goods and services** are goods and services that have been purchased for final use or goods and services that will not be resold or used in production within the year. **Intermediate goods and services**, which are used in the production of final goods and services, are *not included* in the expenditure approach to GDP because expenditures on intermediate goods and services are included in the market value of expenditures made on final goods and services. Including expenditures on both intermediate and final goods and services would lead to **double counting** and an exaggeration of the true market value of GDP.

Total expenditure on final goods and services is broken down into four large expenditure categories, according to the type of good or service purchased. The sum total of these four expenditure categories equals GDP. These four expenditure categories are:

1. **Consumption expenditures:** Personal consumption expenditures on goods and services comprise the largest share of total expenditure. Consumption good expenditures include purchases of **nondurable goods**, such as food and clothing, and purchases of **durable goods**, such as appliances and automobiles. Consumption service expenditures include purchases of all kinds of personal services, including those provided by barbers, doctors, lawyers, and mechanics.
2. **Investment expenditures:** Investment expenditures can be divided into two categories: expenditures on **fixed investment goods and inventory investment**. Fixed investment goods are those that are useful over a long period of time. Expenditures on *fixed investment goods* include purchases of new equipment, factories, and other non-residential housing as well as purchases of new residential housing. Also included in fixed investment expenditures is the cost of replacing *existing* investment goods that have become worn out or obsolete. The market value of all investment goods that must be replaced in a single year is referred to as the **depreciation** for that year. *Inventory goods* are final goods waiting to be sold that firms have on hand at the end of the year. The year-to-year change in the market value of firms' inventory goods is considered as investment expenditure because these inventory goods will eventually yield a flow of consumption or production services.
3. **Government expenditures:** Government expenditures on consumption and investment goods and services are treated as a separate category in the expenditure approach to GDP. Examples of government expenditures include the hiring of civil servants and military personnel and the construction of roads and public buildings. Social security, welfare, and other **transfer payments** are not included in government expenditures. Recipients of transfer payments do not provide any current goods or services in exchanges for these payments. Hence, government expenditures on transfer payments do not involve the purchase of any new goods or services and are therefore excluded from the calculation of government expenditures.
4. **Net exports:** Exports are goods and services produced domestically but sold to foreigners, while **imports** are goods and services produced by foreigners but sold domestically. In the expenditure approach to GDP, expenditures on exports are added to total expenditures, while

expenditures on imports are subtracted from total expenditures. Alternatively, one can calculate net exports, which are defined as expenditures on exports minus expenditures on imports, and add the value of net exports to the nation's total expenditures.

The **income approach** to measuring GDP is to add up all the income earned by households and firms in a single year. The rationale behind the income approach is that total expenditures on final goods and services are eventually received by households and firms in the form of **wage, profit, rent, and interest** income. Therefore, by adding together wage, profit, rent, and interest income, one should obtain the same value of GDP as is obtained using the expenditure approach.

There are two types of expenditures, however, that are *included* in the expenditure approach to GDP measurement but *do not* provide households or firms with any form of income: **depreciation expenditures** and **indirect business taxes**. Depreciation expenditures, made to replace existing but deteriorated investment goods, do increase the incomes of those providing the replacement goods, but they also decrease the profit incomes of those purchasing the replacement goods. The result is that aggregate income remains unchanged. Indirect business taxes consist of sales taxes and other excise taxes that firms collect but that are not regarded as a part of firms' incomes. Consequently, indirect business taxes are not included in the expenditure approach to determining GDP; rather it is included in the income approach.

The difference between the expenditure and income approaches to GDP measurement is illustrated in Figure 4.2.

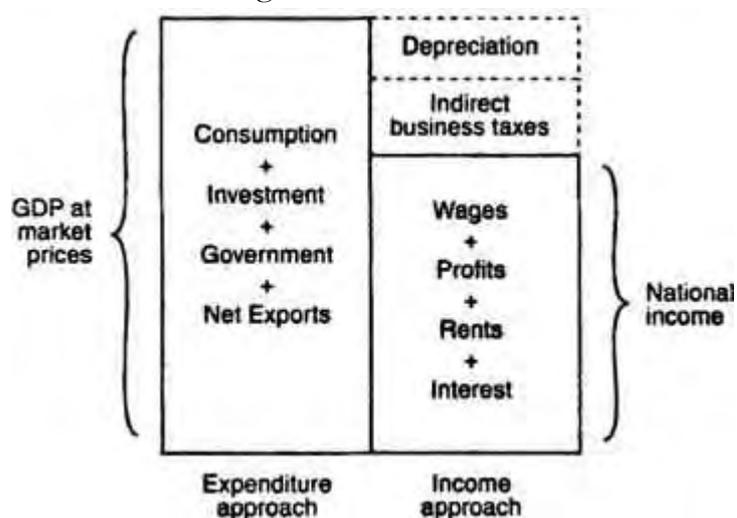


Figure 4.2: The expenditure and Income approaches to GDP measurement

GDP is defined as the total market value of all expenditures made on consumption, investment, government, and net exports in one year. If one subtracts depreciation and indirect business taxes from these expenditures, one arrives at **national income**, which is the sum of all wage, profit, rent, and interest incomes earned in the same year.

Growth rate of GDP. The value of GDP by itself is not very interesting. What is interesting is the annual **growth rate**, or year-to-year percentage change, in the value of GDP. To calculate the percentage change in a statistic, such as GDP, one needs to know the value of the statistic at *two* dates in time. Suppose that the value of GDP last year was Y_L and the value of GDP in the current year is Y_C . Then, the percentage change, or growth rate, of GDP is given by

$$\left[\frac{Y_C - Y_L}{Y_L} \right] \times 100\%$$

This formula is valid for calculating the percentage change in any statistic, not just the percentage change in GDP.

A *positive* growth rate of GDP implies that the economy is expanding, while a *negative* growth rate of GDP implies that the economy is contracting. An expanding economy is said to be in a **boom**, while a contracting economy is said to be in a **recession**

GDP is not a perfect measure even though it is the best single measure. Some flaws include:

- GDP ignores transactions that do not take place in organized markets e.g. if you grow and consume your own vegetables your labour services add nothing to GDP.
- GDP ignores the underground and informal economies.
- GDP does not reflect the quality of goods that make up a nation's output

In spite of these limitations, GDP is a reasonable estimate. It was never intended to measure economic well-being or happiness of a nation's residents.

4.2.2 The Inflation rate

The term *inflation* is used to refer to the increase in the general level of prices of goods and services in an economy. Normally, inflation is measured by the Consumer Price Index (CPI), which tracks changes in the prices consumers pay for a fixed basket of goods and services. The CPI is calculated by the central statistics office through its sampling of a number of households and businesses. When the news report says that the “cost of living” rose by say, 3 percent, it usually refers to the CPI.

In constructing the CPI, the central statistics office selects a “market basket” of a given number of goods and services that are assumed to be the most crucial to the spending of the typical consumer in a given country. Then it assigns weightings to these goods and services according to past patterns of consumer expenditures. Every month, price surveys are conducted to collect prices of goods and service to compute the current cost of the market basket. The central statistics office arbitrarily sets the average value of the goods and services in the market basket for some base period, say 1982 – 1984 = 100. Referring to the table below, we see that the CPI for Zambia was 172.0 in 2000. This means that prices in 2000 were 72 percent higher than the prices in the base period. A typical bundle of goods and services that was worth K1, 000 in the base period would have cost about K1, 720 in 2000 ($K1, 000 \times 1.72 = K1, 720$).

Once the CPI for selected years is known, the rate of inflation between years can be calculated using the following formula:

$$\text{Rate of Inflation} = \frac{[\text{CPI}_{\text{given year}} - \text{CPI}_{\text{previous year}}] / \text{CPI}_{\text{previous year}} \times 100}$$

For example, suppose we wanted to compute the rate of inflation between 1999 and 2000.

Referring to Table 4.1, we see that in 1999 the CPI equalled 166.6 and in 2000 it equalled 172.0.

The rate of inflation between the two years thus equals 3.2 percent.

$$\text{Rate of inflation} = [(172.0 - 166.6) / 166.6] \times 100 = 3.2 \text{ percent}$$

Table 4.1: Consumer Price Index for selected years for Zambia (1982-1984 =100)

Year	CPI
1991	136.2
1992	140.3
1993	144.5
1994	148.2
1995	152.4
1996	156.9
1997	160.5
1998	163.0
1999	166.6
2000	172.0

Trade union negotiators are concerned about inflation because inflation does greatly affect incomes of workers and thus, the national standard of living. Broadly, inflation can also affect economic behaviour that can have significant impacts on the operation of the economy. Taking the case of a worker represented by trade union at the bargaining table, it is interesting to know whether the wage increase being demanded will beat inflation or whether inflation will beat you. In other words, will your nominal income be increased by a smaller percentage, the same percentage, or a greater percentage than the inflation rate? To answer this question, we must adjust the nominal income for changes in the price level. Nominal income is the actual income received. Real income is the actual income received adjusted for any changes in inflation. Real income therefore measures your real purchasing power, the amount of goods and services that can be purchased with your nominal income.

► Real income is computed as follows.

$$\text{Real Income} = [(\text{nominal income}/\text{CPI})] \times 100$$

This formula can help us determine whether we beat inflation.

For example, assume that Mwesho's nominal income rises from K50, 000 in 1999 to K56, 000 in 2000, an increase of 12 percent. Also suppose the CPI rises from 150 in 1999 to 165 in 2000, an increase of 10 percent. Because Mwesho's income has risen by a greater percentage than the inflation rate, she

has more than kept up with inflation. In other words, his real income has risen from 1999 to 2000. Using the preceding formula, we can calculate her real income, stated in terms of the base year, for the two years.

▶ Real income₁₉₉₉ = $(50,000/150) \times 100 = \text{K}33,333$

▶ Real Income₂₀₀₀ = $(56,000/165) \times 100 = \text{K}33,93$

▶ Mwesho's income has risen from K33,333 in 1999 to K33,939 in 2000. This example helps us see how inflation affects real purchasing power. Conclusion: if your nominal income increases by a greater percentage than the inflation rate, your purchasing power rises. But if the inflation rises faster than your nominal income, your purchasing power falls.

4.2.3 Unemployment Rate

The **unemployment rate** measures the percentage of the total civilian labour force that is currently unemployed. The formula for the unemployment rate is given by

$$\text{unemployment rate} = \frac{\text{number of people unemployed}}{\text{number of people in the civilian labor force}}$$

The civilian labour force consists of all civilians (non-military personnel), 16 years of age or older, who are willing to work and are not incarcerated. The number of people unemployed is determined according to certain criteria. In most cases, however, an unemployed person is a member of the civilian labour force who is currently available for work and who has worked *less than one hour* per week for pay or profit. Furthermore, an unemployed worker must have been actively searching for work during the past month. Workers, who are not actively searching for work, referred to as **discouraged workers**, are not considered a part of the civilian labour force and therefore are not counted among the unemployed.

Frictional unemployment. *Frictional unemployment* is the term used to describe unemployment that results from difficulties in matching *qualified* workers with new jobs. Many qualified workers seeking work are not able to find new jobs right away, usually because of a lack of complete information about new job

openings. While it is likely that qualified workers will soon be matched with new jobs, these workers are considered frictionally unemployed during the time that they spend searching for their new jobs.

Structural unemployment. *Structural unemployment* results from structural changes in the economy that causes workers to lose jobs. The same structural changes also prevent these workers from obtaining new jobs. Structurally unemployed workers are *not qualified* for the new job openings that are available, mainly because they lack the education or training needed for the new jobs. Consequently, the structurally unemployed tend to be out of work for long periods of time, usually until they learn the skills needed for the new jobs or until they decide to relocate.

4.2.4 The interest rate

Another key economic indicator is the *interest rate*. Though economists speak of "the" interest rate, there are actually many different interest rates applying to loans of different durations and different degrees of risk. The different interest rates often move up or down together so that economists speak of *the* interest rate, referring to the entire complex of different rates.

The interest rate is important because it governs the redistribution of purchasing power across time. Those people or business enterprises who think they can make good use of additional financial resources borrow, promising to return the purchasing power they use today with interest in the future. Those business enterprises or people who have no immediate use for their financial resources lend, hoping to profit when the borrower returns the borrowed sum--what financiers call the *principal*--with interest.

When economists think about interest rates, they almost always prefer to focus on the *real* interest rate rather than the *nominal* interest rate. The nominal interest rate is the interest rate in terms of money--for example, how many dollars' worth of interest a borrower must pay to borrow a given sum of money for one year. The real interest rate is the interest rate in terms of goods and services--for example, how much purchasing power over goods and services a borrower must pay in order to borrow a given amount of purchasing power for one year.

Whenever interest rates are low--that is, when money is "cheap"--investment tends to be high, because businesses find that a wide range of possible investments will generate enough cash to pay the interest on borrowed money, repay the principal of the loan, and still produce a profit. Whenever interest rates are high--that is, when money is "dear"--investment tends to be low, because businesses find that most possible investments will not generate enough cash flow to repay the principal and the high interest.

4.2.5 The stock market index

The *level of the stock market* is the key economic indicator you hear about most often-- you hear about it every single day unless you try hard to avoid the news. The level of the stock market is an index of expectations for the future. When the stock market is high, investors expect economic growth to be rapid, profits to be high, and unemployment to be relatively low. Conversely, when the stock market is low, it is because investors expect the economic future to be relatively gloomy.

4.2.6 The exchange rate

Another key economic indicator is the *exchange rate*. The *nominal exchange rate* is the rate at which the monies of different countries can be exchanged one for another. The *real exchange rate* is the rate at which the goods and services produced in different countries can be exchanged one for another. The exchange rate governs the terms on which international trade and investment take place. When the domestic currency is *appreciated*, its value in terms of other currencies is high. Foreign-produced goods are relatively cheap for domestic buyers, but domestic-made goods are relatively expensive for foreigners. In these circumstances imports are likely to be high; exports are likely to be low. When the domestic currency is *depreciated*, the opposite is the case. Domestically-made goods are cheap to foreign buyers. Thus exports are likely to be high. But domestic consumers' and investors' power to purchase foreign-made goods is limited. Thus imports are likely to be low.

4.2.7 Poverty

A key social indicator is the poverty rate. There is no single definition that exhaustively captures all aspects of poverty. Admittedly, the fact that there is an extensive and often challenging literature that seeks to define poverty is ample testimony to the difficulties of doing so and may even be a warning that one should not attempt to be too precise about the matter. This manual follows along the United Nations Development Programme's (UNDP) three perspectives to the definition of poverty: the income perspective, the basic needs perspective, and the capability perspective (HDR, 1997:17).

Accordingly, the income perspective posits that a person is poor if, and only if; her income level is below the defined poverty line e.g. \$1 dollar a day (HDR, 1997:17). Often the cut-off poverty line is defined in terms of having enough income for a specified amount of food. From this perspective, therefore, poverty is defined as the inability to achieve a certain income level, known as the poverty line (HDR, 1997:17).

The basic needs perspective defines poverty as a deprivation of material requirements for minimally acceptable fulfillment of human needs, including food (HDR, 1997:17). This definition goes well beyond the lack of private income. It includes the need for basic health and education and essential services that have to be provided by the community to prevent people from falling into poverty. It recognizes the need for employment and participation as well.

The capability perspective explains that poverty represents the absence of some basic capability to function - a person lacking the opportunity to achieve some minimally acceptable levels of these functioning is considered poor (HDR, 1997:17). The 'functioning' relevant to this analysis can vary from such physical ones as being well nourished, being adequately clothed and sheltered and avoiding preventable morbidity, to more complex social achievements such as partaking in the life of the community. The merit of the capability approach is in its ability to reconcile the concept of absolute and relative poverty, explaining that relative deprivation in incomes and commodities can lead to an absolute deprivation in capabilities.

On this basis, poverty is not to be understood in a limited sense of the income perspective but in a much broader sense of the deprivation of the lives people lead. As the foreword to the UNDP's Human Development Report 1997 states: "poverty has many different dimensions. It is much more than low income. It also reflects poor health and education, deprivation in knowledge and communication, inability to exercise human and political rights and absence of dignity, confidence and respects...behind the faces of poverty lies the grim reality of desperate lives without choices and, often, governments that lack the capacity to cope"(HDR, 1997:1). Thus, poverty depicts not only a lack of the wherewithal for material well-being but also a lack of opportunities and of choices most basic to human development. Ultimately, poverty reduction must be about enabling people to lead the kind of lives that they value (and have reason to value it) and unlocking their human capabilities to effectively access the benefits of development. Building along this line, the broad consensus, therefore, appears to view poverty as "**a multi-dimensional web of deprivation resulting in living conditions that lie below some minimum standard**"². Such deprivations include material deprivations in terms of food and nutrition, health, education and literacy, safe water and sanitation, and clothing and shelter. Added to this is deprivation of security on account of vulnerability to external events such as bad weather, natural disasters, illness, and economic shocks (e.g. sharp declines in terms of trade) that reinforce material deprivation. To all these must be added the deprivation of human rights through discrimination, disempowerment, and exclusion that leads to loss of human dignity. Poverty is, thus, multi-dimensional and can be captured only through a multi-dimensional measure.

A truly holistic measure of poverty needs to encompass elements from all the three perspectives. The traditional measures, such as the headcount index, that capture only income deficiency are simply not adequate. One such holistic measure is the Human Poverty Index (HPI), developed by the United Nations Development Programme (UNDP) in its 1997 *Human Development Report*. The HPI that intends to gauge a broader notion of 'human poverty' as opposed to just income poverty, is a composite index that measures deprivation in three broad dimensions: deprivation of a long and healthy life measured by the percentage of new-borns not expected to survive to 40 years of age;

² See for instance Pressend, M. (2007): *Poverty and Development: a proposed Policy Framework for the Southern African Development Community*. Institute for Global Dialogue: Johannesburg.

deprivation of knowledge measured by illiteracy; and deprivation in economic provisioning measured by the percentage of the population lacking access to health services and safe water as well as the number of children who are moderately or severely underweight.

The HPI too, however, does not measure all aspects of poverty. It excludes, for instance, lack of political freedom and personal security and inability to participate in decision-making and in the life of the community. These facets of poverty are of course not easy to measure. In addition, even a composite measure such as the HPI is not a substitute but a complement to money-metric measures. This is because, unlike a headcount measure, it is not possible to associate the incidence of human poverty with a specific group of people or number of people. An HPI value of say 25 percent merely states that on an average 25 percent of the country's population is affected by the various forms of deprivation included in the index. Besides, empirical evidence in different countries and regions of the world reveals that there is no necessary correlation between the values of income poverty incidence and of HPI. There is little income poverty in the Arab States (less than 5 percent) but they have a high level of human poverty (well over 30 percent). On the other hand, human poverty is significantly lower than income poverty in Latin America and in the Caribbean.

4.3 Main Markets of the National Economy

4.3.1 Product market

Product markets are markets that exchange final goods and services, that is, the output that is combined into gross domestic product. The buyers of this production are the four macroeconomic sectors--household, business, government, and foreign. The seller of this production is primarily the business sector. A substantial part of macroeconomics is devoted to explaining how and why gross domestic product exchanged through product markets rises or falls. Product markets, also termed output or goods markets, are one of three primary sets of macroeconomic markets. The other two are resource markets and financial markets.

Product markets take center stage in the macroeconomic analysis of the economy. First and foremost, product markets provide a direct indication of the level of aggregate output, or gross domestic product. This also suggests how and why the level of aggregate output changes as the economy moves through the ups and downs of business cycles. Furthermore, the product markets indirectly shed a little light on the macroeconomic problems of inflation and unemployment

The product markets only exchange final production. They exclude raw materials or intermediate goods that are subject to further processing before resold. They also exclude the services of the factors of production, which are exchanged through the resource markets, and financial assets, which are exchange through the financial markets.

The demand side of the product markets is commonly and conveniently categorized by the particular macroeconomic sector making the expenditure-- household, business, government, and foreign. The corresponding expenditures made by these four sectors are consumption expenditures, investment expenditures, government purchases, and exports.

- **Household Consumption:** The household sector undertakes consumption expenditures for consumer goods. This is the vast majority of aggregate production that is used to satisfy wants and needs. The acquisition of consumer goods by the household sector is the ultimate goal of economic activity.
- **Business Investment:** The business sector makes investment expenditures on capital goods, which add to the economy's production capabilities. Investment expenditures tend to be the most volatile expenditure running through the product markets.
- **Government Purchases:** The [government sector](#) is responsible for government purchases of goods used to pursue assorted [government functions](#) such as national defense, education, and law enforcement.
- **Foreign Exports:** The [foreign sector](#) purchases exports through the product markets. Exports are goods produced by the domestic economy and purchased by the foreign sector.

The primary component on the supply side of the product markets is production of the business sector. However, the foreign sector also contributes production by way of [imports](#).

- **Domestic Business Production:** The domestic business sector combines the four factors of production, which it acquires from the domestic household sector through the resource markets, to produce the overwhelming majority of the goods and services exchanged through the product markets.
- **Foreign Imports:** The foreign sector also contributes goods and services to product markets through imports. Imports are goods produced by the foreign sector and purchased by the domestic economy. To focus attention on domestic production, the import component of supply is often subtracted from the export portion of demand to generate net exports.

The product markets are one of three groups of macroeconomic markets. The other two are resource and financial.

4.3.2 Resource Markets

The services of the four factors of production--labour, capital, land, and entrepreneurship--are traded through resource markets. Resource markets, also termed factor markets, are used by the business sector to acquire the factor services needed for production. Payment for these factor services then generate income received by the household sector, which owns the resources. Note only factor services are exchanged through resource markets, not the actual factors.

4.3.3 Financial Markets

The commodities exchanged through financial markets are legal claims. Legal claims, or financial instruments, represent ownership of physical assets, capital, as well as other goods. Because the exchange of legal claims involves the counter flow of income, those seeking to save income buy legal claims and those wanting to borrow income sell legal claims.

4.4 Essential Problems of the Labour Market in Africa

How can we characterise the labour market challenge in Africa? Despite appreciable improvement in the level of economic growth on the continent in recent years, aggregate employment growth has been slow relative to the population growth. For instance, the ratio of the employed to the adult population in SSA has persisted around 65 percent. The official rate of unemployment has persisted around 8 percent over the last five years (ILO 2010). Besides, the number of working poor is increasing as a result of the declining number of well-paid jobs and the continuing exclusion of a sizeable number of the labour force from the benefits of economic growth. Based on the US\$1.25 per day poverty line, there were over 204 million working poor in SSA in January 2010, representing 81 percent of total employed (ILO 2010). Many of the working poor are located in the informal economy

The number of those in vulnerable employment (i.e. those in employment situations characterise by decent work deficits) has also been on the high side. For instance, 79 percent of those in employment in SSA are in vulnerable employment. The exclusion of women in high paying jobs opportunities persist. The high incidence and duration of unemployment among the youths is on the high side (ECA reports an average of 21%)

Practical Self Test Exercise

- What actions and strategies should trade unions develop to ensure improved economic governance of state budgets and the review of public expenditure? Within this context, what issues require research investigation to consolidate labour's position?
- You general secretary has asked you to provide him with a brief analysis of the current state of the national economy for an upcoming meeting with the IMF and the World Bank. What are the key socio-economic indicators that you will need to include. Please also provide a justification for their inclusion and what relationships you will highlight between the national economy and labour to effectively underscore the trade union position.

MODULE FIVE: CONTEMPORARY ISSUES IN ECONOMIC AND SOCIAL POLICY FOR TRADE UNIONS IN AFRICA

In this module we discuss the following:

- Poverty in Africa and Strategies Implemented for its Reduction
- Overview of National poverty reduction strategies in Africa
- Overview of the decent work framework and MDGs in Africa
- The governance of African States
- External aid and debt the African economy: Role of China in Africa's development

5.1 Poverty in Africa and Strategies Implemented for its Reduction

The renewed focus on poverty reduction as the principal goal of development has generated keen interest in the concept of “pro-poor growth”. The significance of pro-poor growth and how it works has been a subject of intense controversy in the development literature since the 50s. During the 50s and the 60s, the primary emphasis was on raising levels of investment in developing countries, initially by the injection of foreign aid, in order to achieve rapid growth. The expectation was that this would lead to economic growth and consequently a ‘trickle-down’ effect, largely through higher employment and real wages, which would alleviate poverty. However, in many situations, this process was accompanied by rising inequality. It was indeed realized that the ‘trickle-down’ development approach, which implied that the poor benefit from economic growth only indirectly through a vertical flow from the rich did not actually focus on reducing poverty or addressing inequalities.

Given the negative effect of poverty on growth, the focus shifted to the design of targeted anti-poverty interventions in the form of ‘social safety nets’ to tackle poverty. The objective of this strategy was to reach those groups that remain marginalized by the process of growth. This is the implicit philosophy behind the Poverty Reduction Strategy Papers (PRSPs) being prepared by most developing countries, including African ones, for concessional financing by international financial institutions (mainly IMF and the World Bank). The

macroeconomic framework embodied in the PRSPs continues to focus on stabilization objectives with targeted intervention imposed to manage any negative fallouts of the strategy on the poor. It has now become increasingly evident that developing countries, and in particular Africa, should go beyond the establishment of safety nets, and should also directly focus on providing decent jobs and raising income of the poor through explicit policy interventions in the process of growth.

The experience, by and large, is that countries, which have been most successful in reducing poverty, have been ones, which have achieved rapid and equitable growth. There is recognition now that public policies need to influence both the process of generation and distribution of income in such a way as to disproportionately benefit the poor. In other words, the focus now is on pro-poor growth. There is an existing consensus on different policies to achieve pro-poor growth (mainly, macroeconomic stability, financial sector development, physical capital, trade openness, industrial policy, able and functioning state, political and social security; gender equality; access to basic education, health and family planning services; improved access to important factors of production; income distributional equality; increase in labour productivity in agriculture, institutions and governance, and human development.

Education in particular, has been increasingly recognized as a key element in the reduction of poverty whether it is defined in terms of potential provision of income earning assets or production of public goods. Education's central role in societal development has been re-stated in recent thinking on economic development for high quality growth. Such growth cannot be measured by economic results alone; it must also result in improved social conditions for the poor. Thus, the educational level of populations is both an input into an economic growth path but also an outcome of economic growth in that poor people are targeted for upgrading their skills necessary for participation in a modern economy. In other words, the endowment of educational assets renders poor people more equipped and capable to actively participate in modern economies. Secondly, public expenditure on education is one of the main re-distributive channels for poverty reduction.

One of the most important instruments in pro-poor growth is the Poverty Reduction Strategy Paper implemented by a number of African countries.

5.1.1 Poverty Reduction Strategies (PRSPs)

Poverty Reduction Strategy Papers (PRSPs) are documents required by the International Monetary Fund (IMF) and World Bank before a country can be considered for debt relief within the Heavily Indebted Poor Countries (HIPC) initiative. PRSPs are also required before low-income countries can receive aid from most major donors and lenders. The World Bank and IMF require countries to produce a Poverty Reduction Strategy Paper as a condition for debt relief through the HIPC initiative and other monetary aid, as do several bilateral donors. PRSPs are intended to help aid recipient countries meet the Millennium Development Goals (MDGs). They detail a country's plan to promote growth and reduce poverty through implementation of specific economic, social and structural policies over a period of three years or longer. PRSPs provide lending organizations, like the World Bank and the IMF, assurance that aid receiving countries will utilize aid to pursue development outcomes that have been elaborated in the PRSPs and approved by lenders.

PRS Approach: Core Principles

The IMF has outlined five core principles for the process through which PRSPs are elaborated. First, it should be *country-driven*, meaning that country ownership of the strategy should be culminated through broad-based participation of civil society. It should also be *result-oriented* by focusing on outcomes that will benefit the poor, *comprehensive* in exploring and understanding the multidimensional nature of poverty, *partnership-oriented* by involving development partners such as the government, domestic stakeholders, and external donors. Lastly, the development of the PRSP should be based on a *long-term perspective* geared towards reducing poverty. These core principles are central to the goals of the PRS process.

Five core principles underlie the PRSP approach:

Country-driven, promoting national ownership of strategies through broad-based participation of civil society;

Result-oriented and focused on outcomes that will benefit the poor;

Comprehensive in recognizing the multidimensional nature of poverty;

Partnership-oriented, involving coordinated participation of development partners (government, domestic stakeholders, and external donors); and

Based on a long-term perspective for poverty reduction.

Poverty-focused government

One central goal is to create a more poverty-focused government. Previously, poverty reduction had been largely a marginalized concern within governments of developing countries. Through the PRSP process, the issue of poverty has moved up in priority, creating more comprehensive plans addressing poverty specifically than ever before. There has also been an increase in “pro-poor” spending within the health, education and transportation sectors. Due to the demands from the donors to show results, there has been an increase in poverty monitoring through participatory poverty assessments and household surveys.

Civil society involvement

One major function of the PRS is to encourage more participation from the population. The purpose of civil society involvement is to increase the influence of stakeholders in policy creation, program implementation, resource allocation and priority setting. The intent here is to culminate a degree of national consensus, thereby creating a poverty reduction strategy that is more representative of stakeholder's interests. The idea behind this is that the PRS will then be owned by the population and will be sustainable, as it suits the needs and capacities of the country.

Ownership

Ownership of the PRS by the government and population is a very important goal of PRS. It addresses the ineffectiveness of donor imposition of policy conditions from the outside, a common approach of lending organizations. One way the PRS process encourages ownership is by having governments create their own PRSPs in close consultation with the population. This allows them to take ownership over, and thereby stick to, the strategies they and their population deem necessary to improve conditions in their countries. Additionally, the hope is that in developing a PRSP together, a country will gain a more comprehensive understanding of the poverty issues it faces. The PRSP process is also meant to encourage government leadership in implementing their own strategies by allowing them to allocate the aid money themselves in accordance with the strategies they had drawn up in the PRSP. The emphasis on government leadership stems from the problems that arise

when donors establish their own strategy implementation agencies within the client countries, bypassing state agencies and therefore undermining the development of state capacity as well as creating a dependency on aid organizations.

PRSP Formulation Process

The PRSP process begins with an analysis of poverty within the country, taking into account both quantitative and qualitative data. This analysis becomes the basis for the poverty reduction strategy as it indicates the priority issues. It is important at this stage for the government to initiate civil participation, though to the degree with which this is done varies by country.

One of the most important factors of the PRSP is the participatory process through which it is created. It is vital to increasing country ownership of the PRS and promote accountability. The World Bank outlines the following participatory levels:

- Government participation, including ministries, parliament and sub-national governments
- Stakeholder participation and involvement. This can include civil society groups, women's groups, ethnic minorities, policy research institutes and academics, the private sector, trade unions and representatives from different regions of the country.
- Participation of bilateral and multilateral external development partners
- Participation and consultation of the poor or their representatives

Participation has been facilitated by civil society organizations, mainly NGOs. However, since there is no clear framework for consultation with neither the masses, nor a clear definition of participation, many governments are able to conduct and organize it in whichever way they decide. This often results in governments coordinating selective participation and employing other such tactics aimed at diluting public influence over government objectives. Governments have also been unclear on how much they should incorporate the opinions of the poor into their PRSP, especially while also trying to appease the donors. Furthermore, there are no clear criteria on which to judge whether or not the participatory aspect has been fulfilled in the PRSP. This means that the PRSP might be approved by the IMF and World Bank regardless of the lack of true civil society participation in its making.

PRSP Content

According to the World Bank's PRS Sourcebook, a PRSP should contain a poverty analysis, a prioritization of the programs needed to achieve development objectives, targets and indicators, a plan for keeping track of progress towards goals and evaluating effectiveness of implementation of programs, and a description of the participatory process in preparing the strategy.

Criticism and Challenges PRSP

Even with an approved PRSP, some countries have difficulty following through with intended policies and therefore do not reach the PRS outcomes. A large factor of this is the misallocation of budgetary funds that were intended to go towards the PRS.

The PRSP process has been scrutinized for increasing aid conditionality even though it was supposedly created to undo the imposition of policy conditions from the outside by increase country ownership. Some have argued that it is a "process conditionality" not a "content conditionality". This differentiation is important because it means donors are only monitoring if the country has made a PRSP and if it was made in a participatory way. However, this might still pose a problem. Since in the past donors were unable to impose content effectively in the client country's policies, it seems unlikely that donors would be able to impose process standards in making a PRSP. It has already been shown that donor's attempts to influence domestic politics have not been successful in the past. Furthermore, international financial institutions do in fact evaluate PRSP content, not process alone.

A clear definition of what civil participation means has not been laid out by the IMF or World Bank. This creates a problem when evaluating one of the key requirements of the PRSP, which is that it has to be formulated with civil participation. In fact, participation that involves the population working with the government to develop specific strategies to reduce poverty doesn't exist in any developing country. This seems to suggest that the WB and IMF approve PRSPs regardless of the fulfillment of this condition

Critical as background to unpacking the PRSP core principles are two contrasting visions of the intention or project behind the PRSP approach, and the implications that this might have for what can be achieved through this approach. On one hand, the PRSP is viewed as offering a potentially transformative agenda of pro-poor reform, and providing opportunities for national governments to become more committed to pro-poor policy making and for donors to work more in line with country owned priorities and processes. In this view, any measure that requires a government to consult more widely with its citizens is likely to enhance both the quality of the resulting policies and the accountability of decision makers to domestic outcomes.

In the alternative perspective, the very fact that the donor is leading the PRSP approach is seen as predisposing it to have a negative effect on national development. According to this line of argument, the assumption that weaknesses in public policy decision-making can be addressed through internationally driven prescription flies in the face of evidence. Instead of the PRSP principles supporting a transformation in what governments do, they risk overriding or derailing domestic development and policy-making processes by imposing international priorities and undermining local level accountabilities.

In practice, the two visions are less sharply opposed; many on both sides would agree that incremental progress is possible through the PRSP approach but at the same time are aware of the major challenges involved in the consistent implementation of pro-poor policies.

5.2 Decent Work Agenda and Policies for Decent Work Promotion in Africa

Existing literature posits that while low income households possess few assets of their own, the most abundant resource at the disposal of the poor is their labour. Thus, a development strategy that more fully employs a country's human resources and raises the returns to labour becomes a powerful tool for raising household incomes and reducing poverty. In other words, when employment expands along with production, the benefits of economic growth will be widely shared. The International Labour organization posits, however,

that not just any type of employment will lift the poor out of poverty but that it should be decent work.

But what does decent work exactly mean and how can that be achieved in the African context? This section explores the concept of decent work in order to understand how it becomes a requirement for a desired development path. It also locates the role that trade unions can play in advancing the decent work agenda.

Decent work defined

Decent work is generally used to refer to the availability of employment in conditions of freedom, equity, security and human dignity. According to the ILO, “decent work involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organise and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men.” Accordingly, a Decent Work Deficit or lack of decent work is defined as “the absence of sufficient employment opportunities, inadequate social protection, the denial of rights at work and short-comings in social dialogue”

The term decent work agenda is used to generally refer to the ILO’s integrated programmatic approach for pursuing the objective of full and productive employment and decent work for all at the global, regional and local levels. It is centred on four pillars (with gender equality as a crosscutting objective). These four pillars are:

- Standards and rights at work;
- Employment creation;
- Social protection; and
- Social dialogue.

The ILO’s decent work agenda provides a vitally important rights-based lens for assessing and analysing issues affecting the labour market.

Policies for decent work promotion in Africa

Following along the pillars of decent work, the African Regional Meeting (ARM) in 2007 agreed on the Decent Work Agenda in Africa to be

implemented between 2007 and 2015. The meeting re-affirmed and consolidated the conclusions of the Ouagadougou Summit of 2004 which agreed on the priority of employment creation for poverty alleviation as an explicit and central objective of economic and social policies at national, regional and continental levels

Specific elements of the conclusions of the ARM on the Decent Work Agenda in Africa included:

- Mainstreaming decent work into national, regional and international development strategies.
- Investing in enterprise and decent work opportunities in Africa.
- Decent work for Africa's youth.
- Closing the skills gap.
- Social inclusion through job creation for conflict prevention and reconstruction.
- Investing in a basic social protection for poverty reduction.
- Tackling the HIV/AIDS crisis through work place action.
- Implementing labour standards at the workplace.
- Tripartism as a key governance mechanism for inclusive poverty-reducing growth.
- Freedom of association.
- Effective implementation for fundamental principles and rights at work
- Getting African children into school and out of work.
- Rooting out the remnant of slavery.
- Eliminating discrimination in employment.
- Escaping the informal economy trap.
- A fair deal for Africa's migrant workers.
- Improving information for better policies.
- Global, regional and national thrusts for promoting DW continued.

Further, against the backdrop of the 2008 Global crisis, a Global Jobs Pact was adopted in June 2009 to guide national and international policies to refocus crisis recovery efforts around the decent work agenda, laying emphasis on:

- Creating jobs
- Safeguarding rights
- Protecting people

- Promoting voice
- Participation and sustainable enterprises

In 2008, a landmark declaration was adopted by the International Labour Conference: the Declaration on Social Justice for a fair globalisation, which emphasises the inter-relationship and mutually supportive nature of the four priorities introduced through the Decent Work Agenda (DWA). In the declaration, the four strategic objectives are presented in the following order: Employment creation, social protection, social dialogue and fundamental principles and rights at work. This is meant to show that promotion of rights should underpin all the activities in order to achieve real decent work, and that employment has to be created as a first instance.

Decent work country programmes

Decent Work Country Programmes (DWCP) are being established as the main vehicle for delivery of ILO support to countries. These have two basic objectives: (1) to promote decent work as a key component of national development strategies, and (2) to organize ILO knowledge, instruments, advocacy and cooperation at the service of tripartite constituents in a results-based framework. Each DWCP is organised around a limited number of country programme priorities and outcomes.

Generally, however, the overall policy approach to employment generation in Africa has been passive and incoherent, at best indirect. For most countries implementing IMF-WB inspired economic policies, the employment objective is not placed at the centre of the macroeconomic framework – but as a residual of it. The various policies and programmes of intervention on employment appear to largely function as stand-alone initiatives that are neither well coordinated nor linked to an overall employment strategy. Nonetheless, in the overall context of promoting a full, decent and productive employment, a direct approach to the employment objective becomes cardinal. Such a direct approach needs to place the employment objective at the centre of the macroeconomic framework, not as a residual of it. This framework must guide the nation on job creation in the short, medium and long-term and provide for an institutional mechanism for coordinating and linking macro, meso, micro and all sector strategies and programmes on employment in a more targeted and integrated manner.

In most African countries, decent work is not effectively mainstreamed into national development strategies and no targets are adopted for the creation of sufficient decent jobs to absorb new labour market entrants. Where promotion of FDI is being used as a strategy for employment creation, the investment incentives regime pay much attention to the determinants of investment, not to upgrading or formation of linkages between FDI and domestic companies. In essence, the MSMEs sector which holds potential for employment generation has hardly benefited from the presence of FDI. The lack of effective linkages between FDI and domestic firms continues to undermine the conclusions of the 11th ARM on decent work which calls for investing in enterprises and decent work opportunities in Africa. It seems of the essence that Africa must appropriately govern foreign direct investment in order to ensure the creation of decent work

Challenges to DW Agenda

Although few would disagree with DWA, achieving DW poses challenges and controversies. For instance, the DWA requires national and international actors to commit to the objective of creating quality jobs globally and pursue solutions to this challenge. However, capitalist governments, struggle to convince their publics that sustainable development and quality job creation abroad is imperative to prosperity and employment at home. Some governments, particularly in Africa, face the temptation to lower standards to remain competitive in a world economy that is blamed for depressing wages and working conditions. International Financial Institutions provide loan or other assistance to national governments and require recipients to implement certain programs that generally exclude employment targets and have been known to have the negative impacts on job creation. For instance, hitherto, No consensus exists on the inclusion labour standards in trade agreements

Building on own research, trade unions should assist unpack the benefits of decent work to the publics and advocate elements of decent work from living wages to health insurance to workplace standards to basic social protection. Overall, trade union research can demonstrate that decent work can be a vehicle for achieving a fair globalization, reducing poverty and achieving equitable, inclusive, and sustainable development.

5.3 The Governance of African States

Democracy and good governance are synonymously used as twin concepts in political theory and practice. Technically speaking, democracy in political theory has evolved from the classical political theory of the Aristotle to the modern time to embrace new dimensions of good governance as well. There are several traces of democracy that have evolved such as aggregative, direct, deliberative, radical democracies with other in-built variations in practice. It may be instructive to argue that after the fall of the Berlin wall in November, 1989, liberal democracy ideals seem to have taken root with its yardstick tenets of *individual worth, individual freedom, equality, popular sovereignty; majority rule, minority rights, limited government and compromise.*

A liberal political, Zinn (1992:2) listed a criteria as a description of democracy, which are useful to this discuss as: *democracy as participation in decision making; equal access to information; protection on matters of life and death; equality before the law; equality in the distribution of resources; equal access to education, knowledge and training; freedom of expression; freedom in individuality in private life; and opportunity protest unjust laws and decision.* As aptly put by Gunasegaram (2009) “*democracy is much more than one man, one vote. It is a system of protection of everyone’s rights within the context of majority rule.*”

To most trade unions the definition of good governance is therefore simply an extension of such democratic values. The UN also underscores this and defines good governance as having eight major characteristics namely “*participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follows the rule of law*”. The World Bank also concurs and has a *World Bank Governance Surveys* that are diagnostic tools used to assist it partner with governments around the world in measuring and mapping governance challenges within the public sector structure. The survey questionnaires are applied to households, private enterprises and public officials within the country to assess both perceptions and direct experiences with corruption and the state. The data is used as a major input into the design and implementation of National Anti-Corruption Action Plans and serve as a benchmark to measure future progress. As of 2007 more than 20 countries in Latin America, Eastern Europe, and Africa have implemented the surveys. The major tenets used include *voice and accountability; political stability and*

absence of violence; government effectiveness, regulatory quality; rule of law; and control of corruption (World Bank, 2010)

Good governance assures that corruption is minimized, the views of minorities are taken into account and that the voices of the most vulnerable in society are heard in decision-making. It is also responsive to the present and future needs of society. The major extension is that good governance can be “*used in several contexts such as corporate governance, international governance, national governance and local governance*” (UN, 2006).

It is broad nexus in conception of democracy and good governance that underscores the value of all actors including trade unions to participate in decision making processes of any polity. Though some political theorists argues that these terms are not conclusive in definitiveness and measurement in theory and practice given that different levels of economic and cultural differences and development; it is, however, informative to argue that they are an ideal that is worth the attempt. As Zinn (1992:30) put it “...but the point of having the ideals is not that they can be perfectly achieved, but that they do not let us rest content...”

Most trade unions in Africa believe that any democracy and good governance project is linked and should be a continuous development agenda of the people, for the people, by people. The entails the creation of a dynamic, participatory and radical democracy, which regards peoples’ mobilisation, demonstrations, open hearings as part of the struggle for an ethical and developmental State and accountable local and global capital. Trade unions in Africa should thus forge strategic alliances and networks with progressive forces at national, regional and global levels and advocate for a politically governed redistribution of wealth and opportunities from the formal to the non-formal sectors of the economy as key to achieving real democracy and good governance.

5.4 External aid and debt the African economy: Role of China in Africa’s Development

It has been argued that the new Chinese engagement with developing countries is also increasingly visible at the political level in the multilateral arena. Its leadership is reflected in the “Group of 77 plus China” (which

brings together more than 130 developing countries) where it has sought to focus on addressing the adverse effects of economic globalisation, improving South-South partnerships and bridging the North-South divide. Since joining the World Trade Organization in 2001, China has become active in confronting the trade asymmetries that exist between developing and developed countries and it plays a key role in the G20, which brings together China and 20 other major developing countries. It presents itself as a developing country and stresses the importance of South-South relations to overcome the colonial legacies.

China's development cooperation was spelt out by President Hu Jintao in his 2005 speech to the UN High-Level Meeting on Financing for Development.³ According to President Jintao, China has decided to accord zero tariff treatment to some products from all the 39 Least Developed Countries (LDC) having diplomatic relations with China, which covers most of the China-bound exports from these countries. Secondly, China will further expand its aid program to the Heavily Indebted Poor Countries (HIPCs) and LDCs and, working through bilateral channels, write off or forgive in other ways within the next two years, all the overdue parts.

Thirdly, China will provide US\$ 10 billion in concessional loans and preferential export buyer's credit to developing countries to improve their infrastructure and promote cooperation between enterprises on both sides. Fourthly, China will increase its assistance to the developing countries, African countries in particular, providing them with anti-malaria drugs and other medicines, helping them set up and improve medical facilities and training medical staff. Lastly, China will train 30, 000 personnel of various professions from the developing countries to expedite their human resources development.

The People's Republic of China has become an important and influential player in Africa and is increasingly a source of political and financial support for many African governments, particularly in countries that are resource-endowed. Africa's rich resource base has led to a Chinese courtship, the magnitude of which was probably last seen during the days of the Cold War, albeit at the time mainly for ideological and political rather than economic reasons (Stephan, Power, Hervey and Fonseca 2006:10).

³ Available online at: <http://www.chinaconsulatedsf.org/eng/xw/t213095.htm>

According to the Center for Chinese Studies (2006: 7), a number of incentives drive China's commercial engagement with Africa. Fundamental among these is China's increasing need for energy sources and raw materials to fuel its rapidly growing economy. As global demand for energy continues to rise, major players like the United States, the European Union (EU) and Japan are facing a new competitor in the race to secure long-term energy supplies, and that is China. With its GDP reaching 10.7 percent, China is intent on getting the resources needed to sustain its soaring economy, and is taking its quest to lock down sources of oil and other necessary raw materials across the globe.

According to the U.S.-China Report (2006:7), China became the second largest international consumer of oil after the United States, with a daily demand of 5.5 million barrels per day. It was projected that in 2006 China would account for 38 percent of the total growth in world oil demand. It has been argued that the continuation of China's dramatic year-on-year increase of nearly half a million barrels per day (an increase of approximately 16 percent in 2005 and 14 percent in 2006) in petroleum consumption will place growing stress on the world's energy resources and distribution systems (US-Chinese Commission Report 2006: 8).

China's growing demand for energy to feed its booming economy has led it to seek oil supplies from African countries including Sudan, Chad, Nigeria, Angola, Algeria, Equatorial Guinea, and the DRC. According to the United States' Energy Information and Administration, China accounted for 40 percent of total growth in the global demand for oil in the last four years. In 2003, it surpassed Japan as the world's second-largest oil consumer after the United States.

Chinese companies invested a total of \$175 million in African countries, primarily on oil exploration projects and infrastructure (Pan, 2007). On January 9, 2007, the state-owned Chinese energy company CNOOC Ltd announced that it would buy a 45 percent stake in an offshore oil field in Nigeria for \$2.27 billion and take a 64 percent stake in Sudan's oil exports. Angola accounted for half of China's oil imports from Africa in 2005.

Sub-Saharan Africa's natural resource exports to China have grown exponentially from just over US\$ 22 billion in 2006 (Forster, Butterfield, Chen and Pushak, 2008:29). Petroleum accounts for 80 percent of total exports by value during the 2002-06 period. The bulk of Africa's oil exports continue to go to OECD countries. Over the 2001-2006 period, 40 percent of Africa's oil production was exported to the United States of America, a further 17 percent to Europe and 14 percent to China. China has greater weight as a minerals trading partner, accounting for around 60 percent of Africa's exports of cobalt and 30 percent of timber.

5.4.1 The Programme for China-Africa Cooperation

The Programme for China-Africa Cooperation in Economic and Social Development in 2006 signals a growing partnership, which focuses on a number of issues such as inter-governmental co-operation, trade and investment, co-operation in engineering and other infrastructural projects, finance, debt relief and cancellation, tourism, migration, agriculture, health, capacity building, technology transfer, environmental compliance, economic diversification and beneficiation, arms control etc.

According to Stamp (2007: 1), Beijing points to a pro-active record on aid and debt relief, having given more than \$5.5 billion in assistance and cancelled the debt of 31 countries. China has also fulfilled its commitment to grant 28 least-developed countries (LDCs) in Africa zero-tariff treatment for their China-bound exports under 190 tax items, as of 1 January 2005 and has also trained more than 2 400 African personnel in various fields, bringing us within hopeful reach of the goal of training 10 000 African personnel between 2004 and 2006. In addition to the development support, China intends to provide \$10 billion in concessional loans and preferential export buyer's credit, within the next three years, to developing countries to improve their infrastructure, and promote cooperation between enterprises on both sides.

Key to the China-Africa Cooperation Agreement is the provision of development assistance to African countries, focusing on the promotion of local industries, sourcing of local materials and the creation of employment. Furthermore, the programme advocates for the utilization of local expertise and materials, the creation of local employment and the development of

human resources of African countries.⁴ Fundamental to the creation of local employment is China's preferential treatment or access to multi-million tenders in Africa because of its competitive advantage for instance the charging lower prices.

In supporting African countries in their economic and social development, the Chinese government undertakes to continue providing assistance to African countries, within its capacity, in light of specific economic conditions of the recipient countries and within the framework of South-South co-operation. Fundamental to the Cooperation agreement is the need to improve the production capacity in Africa and in diversifying the composition of African exports and share experiences in overcoming Africa's export dependence on primary commodities, single products and raw materials.

China also agrees to promote investment in, as well as exploration and beneficiation of metallurgical resources in Africa. This idea of mineral beneficiation and diversification was part of the Lagos Plan of Action of 1980; however it has never been fully implemented. If implemented, the beneficiation would boost African economies exporting raw mineral resources and create employment. This process could be perceived as a threat to western countries and their corporations, which have controlled Africa's minerals for decades but failed to promote beneficiation on the continent.

The Agreement also noted that Chinese enterprises should enhance co-operation with their counterparts in Africa and employ as well as train more local people, including the usage of locally available resources. If properly managed, the promotion or use of locally available resources could help to develop the ailing economies of the African countries. In addition to the recent debt relief to the Least Developed Countries, China promised to cancel debt amounting to 10 billion RMB yuan.

As a strategy to overcome the trade imbalances between Africa and China, the latter undertakes to encourage its enterprises to give preference to the import of African products in the light of market demand and conditions; strive to make its investment and trade centres in Africa a success, and to facilitate the establishment of similar centres of African countries in China. The centres are

⁴ http://english.focacsummit.org/2006-09/20/content_629.html.

meant to play an effective bridging role in facilitating exchanges and communication between enterprises.

The need to provide better and preferential access to the Chinese market for African exports featured prominently in the cooperation agreement. China agreed to share with African countries its experience in the field of investment promotion relating to the establishment and management of free and special economic zones.

5.4.2 Investment Trends

Trade between China and Africa has quadrupled since the beginning of this decade. Much of the accumulated stock of Chinese FDI in Africa is concentrated in extractive sectors such as oil and mining and because such investments are typically capital intensive, they have engendered limited domestic employment creation (Broadman 2007: 12). In the past fifteen years, China's foreign investment in Africa has risen to US\$ 850 million, while China's share as the destination of total African exports has risen from just 1 percent to nearly 10 percent. China is now Africa's third largest commercial partner after the US and France, and second largest exporter to Africa after France. Like the former colonial countries, China backs its trading relations with aid, debt relief, scholarships, training and the provision of specialists. It is also a major supplier of military hardware, like the West, and has supplied peacekeepers to the Democratic Republic of Congo and Liberia, as well as election observers to Ethiopia.

Chinese FDI and aid is qualitatively different from European and North American sourced FDI. Historically, Western and Japanese FDI in Sub Saharan Africa (SSA) have come from privately-owned corporations and focused on profit maximization, generally with relative short-time horizons. By contrast, much of Chinese FDI in SSA comes from firms, which are either wholly-or partially state-owned (Kaplinsky et al, 2006:14). These Chinese state-owned companies have access to very low-cost capital, and hence operate with much longer time horizons. They are an integral part of the bilateral relations that China has established with African states.

According to Kaplinsky et al (2006), many of these investments are either explicitly or implicitly linked to achieving China's strategic objectives, often

those which are focused on long-term access to raw materials, and are closely bundled with Chinese aid. Gelb (2006: 204) pointed out that the rise in South-South investment in Sub-Saharan Africa will not automatically change the terms of the relationship between Africa and “the North” (industrialized countries) in the short-term, but it can provide individual governments in Africa with greater bargaining power in their relations with multinational corporations.

Practical Self Test Exercise

- Are the poverty eradication strategies that have been adopted over time been effective in Africa?
- Explain how the decent work framework fits within the context of desire to achieve MDGs in Africa.
- How would explain the governance status of African States currently?
- What role should China play in Africa’s development?
- What are the alternatives policies for Africa’s development would you formulate?

Note of acknowledgement:

*This information was adapted wholly from literature review by Thulani (2006) *Chapter 1: An introduction to Chinese-African relations* in the African Labour Research Network (ALRN) book titled– *Chinese investment in Africa: a labour perspective (2006)*.

The ALRN is labour research think-tank for trade unions in Africa

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