CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND

The major goals of macro-economic policy are: to achieve full employment in other words maintain a low and stable level of unemployment. To maintain a relative stable level of price payment position at a fixed stable exchange rate of growth.

Practically, inflation which is a persistence increase in general price level is one of the macro-economic problems facing Nigeria today. According to Ewa Udu and Agu G.A it began in Nigeria during and after the Nigeria civil war (that is from 1965-1970).Before the war, there was noticeable increase in the price of so many commodities such as a bag of 50cups of rice that cast #14.00 rises to #43.00 immediately after the civil war in 1970. Also there was an increase in the price of other goods and since 1979 the rate of inflation in Nigeria has been increasing.

Again, the Nigeria civil war (that is secessionist Biafra) was faced with hyperinflation. During that time everything was scarce relative to demand. This is because there was excess supply of money by the federal government in attempt

to persecute the war with few available goods. More so inflation has been a scarce of concern to the government and something that was to be abided absolutely at any cost, because it is one of the worst imaginable social evil in a society.

However, there have been observed period of unemployment in Nigeria until 1930's when the classical economist theory which propound that the demand for labor will also be equal to the supply of the labour at the prevailing money wage rate, as this theory collapsed, due to the depression of the 1930's government has lend to accept periods of unemployment as inevitable. Since independence in 1960 and in mid of 1980's unemployment have been viewed as one of the most untreatable problem facing the Nigeria economy up till today. It assumes alarming dimension with the emergence of graduate unemployment. As a result of this, the government has made many attempts at achieving full employment through their various policies.

Nigeria economy has undergone strains and stresses in their balance of payment since the collapse of the oil boom in early 1980's. During that time, Nigeria export was mainly crude oil which grew steadily from 1975 and reached a peak in 1980, the import grew faster, bringing about a growth deficit in the visible

trade balance. Also the production and consumption patterns that emerged from, the era of the oil boom could not be sustained in the face of declining export or foreign exchange and inflation resulted from the heavy borrowing by the civilian administration, this made the balance of payment, capital account balance to reduce to degree of deficit which leads to low external reserve. Furthermore inflation is generally used to describe a situation of rapid persistence and unacceptable increase in general price level in any economy which brings about decrease in the value of currency.

Also Lerner (1949: pg 27) describe inflation as an excess of demand over supply. Again Solow (1970) sees inflation as going on when one needs more and more money to buy some representative bundle of goods and services meaning that inflation is a part of the adjustment process between two equilibrium. However it is not every rise in price that is being regarded as inflation but a persistent rise in aggregate price of goods and services; this is because price may be rise to support a higher level of aggregate welfare.

The main reason for allowing inflation is because it allows for substantial redistribution of income and wealth from savers to borrowers that is from those who cannot protect themselves from the rise in the price of what they buy by

raising the price of what they sell to those who can afford. High inflation hamper growth and development of an economy as it discourage savings and investment.

Meanwhile, the dynamic feature of unemployment has several factors being temporal or chronic in nature. A person is said to be unemployed when he or she is able and willing to work and is available for work (the person is actively searching for employment) but does not have work. There are so many types of unemployment which are functional unemployment which result from normal turnover of labour, a structural unemployment refers to unemployment rising because there is a mismatch of skills and job opportunities when the pattern of demand and production changes, mass unemployment is the most serious type of unemployment. Since it occurs because of general deficiency in demand and equally affects every sector of the economy. We are concerned about unemployment for many reasons firstly; unemployment generally reduces output and aggregate income. Increase inequality since the unemployed lose more than the employed. Secondly it makes the unemployed ones sometime feel as if the society does not need them. This therefore, causes misery, social unrest and hopelessness. There are so many causes of unemployment such as demographic factors, low rate of industrialization strategy and the minimum role of the government.

The balance of payment is a record of all economic transaction involving payment and receipt between the residents of one country and the residents of other countries of the world in any period usually in one calendar year. Specifically the balance of payment records the import of goods and services, income transfer as well as changes in country liabilities to claim assets on the rest of the world. It is a flow not a stock concept and involves more than payment, that is transaction that are not paid in cash and kind, deferment of debt, services payment due to unremitting profits among others. Exceptional financial items means those transactions that finance balance of payment needs or are undertaken to bridge the gaps in the balance of payment. As a result of the importation of crude oil in the economy, Nigeria balance of payment is divided into oil and non-oil sectors. The oil sector is the most significant components of the economy and the largest foreign earner.

In assessing the cost of inflation distinguish between perfectly anticipated inflation which occurs when the rate of inflation is expected and has been taken into economic transaction that is the exchange rate will be adjusted tp eliminate any adverse effects of inflation on the balance of payment. For instance, "if Nigeria inflation rate is above that of her competition the value on naira would depreciate quickly to restore price competitiveness, but in reality exchange rate do not adjusted perfectly anticipated inflation rate means unexpected inflation.

One of the causes of balance of payment problems is domestic inflation. Inflation create no problem for the balance of payment if all one's competitor are also inflating at the same rate since it is relative prices that matters in international trade as domestic trade if however, one country's price level is rising faster than the levels of competitors countries, imports will rise more than the levels of export and balance of payment problem will ensure moreover, a necessary condition to concern about the balance of payment in the policy decision is support a fixed exchange rate rather than allow the rate to be determined in free market, so as to eliminate fluctuation in the balance of payment rate.

In the recent years there has been emphasis laid pertaining to the relationship between inflation and unemployment. According to Milton Friedman, high inflation increase unemployment in several ways:

 High inflation may lead to government to impose wages and price control thereby impending market forces which increase unemployment.

- II. High inflation rate increase the risk associated with any assessment of future returns on investment.
- III. High inflation may depress consumption as it reduces the purchasing power of any currency.

Friedman's observation shows that there is a positive link between the rate of inflation and the rate of unemployment. That is, inflation and unemployment moves in the same direction. The question at this point is does inflation and unemployment really moves in the same direction, do they move in the same direction in Nigeria? What is the trade off like in Nigeria? Although low rate of inflation is an advantage to a country, it could be argued that the disadvantages of inflation are greater than its advantage.

1.2 STATEMENT OF PROBLEM

Inflation, unemployment and maintenance of stable balance of payment are all basic macro-economic problems facing every government in the world today. Inflation causes uncertainty about future prices, thereby affecting the decision on expenditure, savings and investment and causes misallocation of resources. High inflation equally boosts growth and development policies of the policy makers. Our concern on unemployment is based on the fact that high unemployment leads to loss of output and reduction in aggregate income, it increases inequality since the unemployed loose more than the employed. Prolonged unemployment can cause misery, social unrest, loss of confidence and hopelessness for the unemployed; more so unemployment usually unwanted by the unemployed.

Nigeria's balance of payment have continued to show deteriorating trends. The cause of this deterioration includes, the import syndrome, mounting external indebtedness, hostile international environment, over dependence on crude petroleum etc, there is a link among these variables, which after time leave government confused and defected. This is because low unemployment is associated with a rapid rate of inflation; similarly high unemployment implies selflabor markets and consequent inability to push up wages. Consumers income and spending and also depressed and demand condition for rapid inflation are therefore unfavorable. Therefore, there is a tradeoff between the rate of inflation and unemployment. Price stability can only occur at the cost of high unemployment rate and low unemployment rate can only occur at the cost of inflation.

However, the Nigerian economy does not reflect this so called tradeoff. This is because experience has shown that rising inflation also leads to unemployment rate increase, despite the monetary and physical policies by the authoritative in Nigeria.

1.3 OBJECTIVE OF THE STUDY

The objective of the study; "an empirical analysis of the link between inflation, unemployment and balance of payment in Nigeria" includes the following:

- i. To analyze the impact of inflation and unemployment on balance of payment.
- ii. To determine the rate of inflation or unemployment that hampers economic growth and hinders development.
- iii. To make useful recommendation based on the empirical find.

1.4 HYPOTHESIS OF THE STUDY

This hypothesis is formulated to acquire necessary information and basic assumption of the study. Hypotheses are formulated in two forms namely:

- Null hypothesis (Ho): Is a hypothesis which states a no difference or no relationship exists between two or more variable. It also states a negative direction.
- II. Alternative hypothesis (Hi): It specifies any of the possible conditions not anticipated in the null hypothesis and it also states the positive direction.

Ho: Inflation and unemployment have no effect on balance of payment in Nigeria.

Hi: Inflation and unemployment have an effect on balance of payment in Nigeria.

1.5 SIGNIFICANCE OF THE STUDY

The study is significant in many ways:

- i. It will bring into live light the salient features of the issues being discussed.
- ii. The study will aid the police makers in Nigeria in terms of management policies to curb inflation, reduce unemployment especially among the youths etc.

iii. The study will underscore some of inadequacies of the authorities in their quest to solve the macro-economic problems and thus providing a spring board for better decision.

1.6 SCOPE AND LIMITATION OF THE STUDY

The study was carried out in Nigeria to establish the import between inflation and unemployment on balance of payment. The scope of the study covers from 1980-2010. However in the study of this nature there is usually a possibility of encountering certain difficulties which eventually act as constraints to the validity of conclusion arrived at. These difficulties did not discourage the researcher as the challenges were boldly faced. The limitation to the study includes: the financial difficulties in an effort to have a sufficient researcher was faced with some financial predicament considering high cost of not only education materials coupled with the high transport fare. Again time factor, the research work was conducted simultaneously with normal academic work within a short period of time in which some valuable information could be obtained.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 THEORITICAL REVIEW

Within the intensification there has been increase interest on the subject matter, not only among ordinary citizen and their political leader but also economists.

However, it may be well argued that inflation currently has been for decades and threatens to be in the future one of the most crucial macro economic problems facing most counties in the world. In an attempt to discuss inflation and its effect on the balance of payment in Nigeria the researcher finds out that the literature contains two competing hypothesis which attempt to explain the phenomenon. These are the "monetarists" and "structuralist" views, the literature will be concerned only with these two families.

2.1a THE MONITERIST VIEWPOINT

Following the publication of Keynes on the general theory of employment, interest and money. In 1936, economists discovered the traditional quantity of money, but at the University of Chicago the quantity theory of money continued to be a central and vigorous part of the oral tradition throughout the 1930's and 1940's .At Chicago, Milton Friedman, Henry Simmons, Lloyd Mints, Frank Knight and Jacob Viner taught and developed a more subtle and relevant version of the quantity theory of money in its theoretical form, in which the foremost exponent of the Chicago version of the quantity theory of money who led to be the so called "monetarist" is professor Friedman. He in his essay "the quantity theory of money. A restatement" published in 1956, set down a particular model of quantity theory of money, this us discussed below.

These eminent economists among others have empirically proved that various rates of inflation in different economies can be explained by respective rates of growth of money supply per unit of national output. The monetarist argue that inflation is essentially monetary phenomenon, the control of which requires as a necessary and sufficient condition, the control of money in such a way that it grows at a rate consistent with the growth of the demand for money

at stable prices. The monetarist model is predicated upon the existence of a stable demand function for real money balance for transactionary and precautionary purposes which is determined by the level of real income in the economy.

In addition, the monetarist postulates that money supply is exogenous and cannot be controlled by the monetary authorities. Accordingly inflation is seen as a consequence of money supply expanding more rapidly than money demand specifically, the monetarist believe that prices rise when the rate of increase in money supply is greater than the rate of increase in real output of goods and services. It is imperative to mention at this point that it is not enough to know that monetary expansion is the proximate cause of inflation.

2.1b THE RELEVANCE OF THE MONETARIST VIEWS IN THE NIGERIAN EXPERIENCE.

Despite the limitations of the monetarist views, there is a strong relationship between inflation and money supply. Between 1960 to 1969 money supply increased by an average of 24.3% per annum respectively during the period under review. Consequently, the rate of inflation was 3.6% and 16.3% per annum for these two periods. Note that during this period, the overall government deficit rose from №102,000,000 in 1931 to №170,000,000 in 1989, the banking system credit related to the private sector increase from about №199,000,000 in 1938 to №242,700,000 in 1991 as a result of an increase in competition in banking system.

2.1c THE STRUCTURALIST VEIWPOINT ON INFLATION.

This theory was developed by John Maynard Keynes during the early 1930's following the great depression, this arise mainly by the need to explain less developed country's long run inflationary tendencies in terms of certain structural rigidities, market imperfection and social tensions. The basic argument of the structural bottlenecks or constraints in an economy seeking to attain level of growth and development, inflation is unavoidable, implicit inflation is structural and is generated in the cause of the attempts to develop in the face of structural rigidities. Although there are many facts of structuralist approach: they fall in three broad categories:

- I. Inelasticity of Agricultural production.
- II. Foreign exchange bottlenecks.
- III. Financial constraints.

The structuralists believe that rapid urbanization and rising income generated by import substitution and industrialization has led to an increase in demand for Agricultural produce (especially food items) which exceeded supply. The structural constraints that has led to disequilibrium in the supply and demand of food items is seen as arising from misallocation of resources especially of noncapitalist land owner who are not profit maximizes and also by a large number of subsistent farmers who hardly participate in the market economy.

Meanwhile, foreign exchange bottlenecks arise because capital inflows and earning from exports are generally inadequate in meeting rapid rising import demand which is necessary for rapid development. Because import exceeds exports the consequent balance of payment deficit is often met by a system of import controls to shortage of essential goods these exert an upward pressure on the price level especially on the price on consumer goods. Furthermore, the structuralist argue that falling proceeds from export which arise partly from the lack of diversification of agricultural production due to shifts in demand and the need to reallocate the factors of production and partly from the inability to improve earning leads to inflation because government often resort to deficit budgeting to compensate the decline of the revenue from export trade.

The three constraint identified by structuralist is lack of financial resources the argument are in two dimension, firstly it is posited that inadequate public revenue in the face of rapidly expanding public services especially in provision of social infrastructure leads to deficit financing with inflationary consequences.

The second side of the which is low rate of private capital formation which has become pronounced due to the tendency towards investment to contribute more than its fair share in capital formation while the monetarist are of the view that uncontrolled money supply is the price of inflation, the structuralist blame inflation on excessive government spending and indiscriminate budget deficit financing. They argued that due to the burning desire of the developing countries to develop quickly/ their government engaged in increased expenditure demand and if aggregate supply does not respond positively to change in demand prices tend to rise. It is pertinent to state via deficit financing which structuralists emphasize exert great upward pressure on money supply in the monetarist school is analogue to deficit financing.

2.1d THE RELEVANE OF THE STRUCTURALIST VIEW TO THE NIGERIA EXPERIENCE.

In Nigeria, there is no doubt that agricultural production has remained static since the late 1960's in the face of increasing demand evidently because of the discovery of oil. Although exports expanded rapidly in 1960's due to oil boom, the 80's, witnessed a period of decline export as a result of the oil glut, since Nigeria is a mono-cultural economy relying heavily on oil for survival this has also resulted in a balance of payment crises and increasing foreign indebtness and high depreciation of exchange rate.

2.1.5 TYPES AND EFFECT OF INFLATION

2.1.5.1 TYPES OF INFLATION

Demand pull inflation:

This is a situation where the basic factors at work are the increase in demand for resources either from the government, entrepreneur or household. The result is that the pressure of demand is such that it cannot be satisfied with existing stocks, increasing imports or directing suppliers from the exports market. Nigeria has mild inflation in the 1960's which can be said to be in harmony with the process of economic growth. However the inflation which characterized the 70's and 80's can be explained by the demand pull inflation theory since the 70'aggregate demand appears for manufactured goods

The oil boom, the Udoriji's salaryward of 1975 and the liberal credit policy of Banks led to a considerable increase in the production capacity of the economy, were some of the factor of the demand pull inflation of the 1970' and 80's.

Imported inflation :

The increase dependence of the world economy arising from international trade has made it possible for countries to import inflation. At the time when are raising all over the world it became impossible for dependent country or economy to avoid importing inflation from rest of the world

There is no doubt that Nigeria has been importing inflation from the rest of the world. This state of affairs is due to partly the prevailing advancing inflation pressure in economy of Nigeria foreign trade partners and international monetary crisis over which we have direct control.

Cost Push Inflation:

This theory ascribes increases in the price of commodities to the cost of factors of production which are wages, interest rate, rents and profit margin. Emphasis is however placed on wages increase as prime factors of inflation. As the level of unemployment rises the demand for workers rise progressively so the economic position of the workers is enhanced. To exploit this situation, they may ask for increase in wage rate which are not justifiable either on grounds of poor rise in productivity or cost of living the employees are non agreeable to concede to these wage claims because they hope to pass these rises in cost to the customers in the shape of higher prices. Higher prices increase the cost of living, wages are again increased and the process repeats itself. If caution is not applied the process can be self perpetuating in an inflation wage spiral.

Structural Inflation:

The structural model of inflation developed by professor Schuctze seeks to explain the long run tendency of price rise especially in industrialized countries; it shows that inflation may be the consequence of internal changes in the structure or demand, even though overall demand may not be excessive. This theory is

based on the fact that in many areas and sectors of the economy, wages and prices are flexibly upwards in response to increase in demand but not flexibly downward when demand decline.

In a dynamic economy like Nigeria such changes are essential part of the nation's economic activity arising from change in the structure of consumer taste and desire. The expansion of demand for the output of particular industries or sectors will lead to wage and price increase in these areas because wage and price are upward sensitive when demand is rising. But the contraction of demand in the other sectors will not lead to any corresponding downward movement of prices. Thus the overall average level of prices will surly rise.

2.1.5.2 EFFECTS OF INFLATION

Different types of inflation as have been discussed gives rise to different types of effects in a National economy. Thus, depending on whether inflation is continues or creeping, anticipated or not, rapid or prolonged, repressed or semirepressed etc, one world export different effects on major economic variable. It is useful to point out some of the general effects:

- 1. Effect on production: Keynes felt that as long as there were unemployed resources in the economy a moderate case of inflation might be in order because this would lead to optimism in businessmen to invest more. But this cannot go on for long because the limit is set by full employment ceiling after which the price starts rising and moderate inflation start assuming the nature of hyper inflation which has disastrous consequences on production. It distorts the smooth functioning of the price mechanism, which hinders capital formation and stimulate activities.
- 2. Effect on Debtors and creditors: Debtors borrow from creditors to pay later along with the rate of interest at some future dates. Changes in this prices level effect them in different ways. During inflation when prices rise, the debtors pay back less in terms than they had borrowed and thus to that extent they are gaining. On the other hand, these creditor get less in terms of goods and service than what they had lent and stand to loss Grupta (1980:596-596 -597).
- **3. Effect on Entrepreneur:** When price rise, producers, traders, speculators and entrepreneur stand to gain on account of wind fall profit because there is a time lag between the two, moreover, they gain because the price of their inventories rise.

4. Effect on Investor: Different kinks of investors are affected differently by inflation. One can invests in bonds and debentures which yield a fixed rate of interest, income or one can invest in real estate or equities(share) whose returns (dividends) rise and fall with price, earned by the companies concerned. When price rise, the returns in equities will go up an account of the rise in profit, which bonds and debenture holders gain nothing, as their income remain fixed.

2.2 EMPIRICAL REVIEW:

Lucas (1973) investigates the unemployment-inflation trade off across countries and find out that, in general prediction of the theory are not entirely inconsistent with the data. Lucas study has been extended by the other authors, Alberro (1981) and Kormendi and Meguire (1984) with less than clear cut result, in general countries experiencing extremely volatile demand import tend to support the Lucas thesis. However, as Artfield et al (1985) note Lucas test and its extension are subject to measurement errors and misspecification problems, quite apart from not testing for structural neutrality. It is posited that inadequate public revenue in the face of rapidly expanding public service especially in provision of social infrastructure led to deficit financing with inflationary consequences. The short coming has arisen among other, for the low level of development, the underdeveloped nature of institutions for mobilizing saving both private and public.

2.3 Trends in Nigeria Balance of Payment (1980-2010)

The following table represents a comprehensive data on the trends in Nigeria Balance of payment from (1980-2010). It also shows the differences on inflation, unemployment and exchange rate.

The analysis focus primarily on the current account, capital account, overall balancing and it's financing. However development is external debt, exchange rate and reserve movement are also discussed.

✓ CURRENT ACCOUNT

The capital account for most of the period under consideration remains under pressure. Except for 1995, current account deficit was recorded in the other years. The observation in 1995 reflected the sharp increase in oil prices which have after math's of wars in the Middle East.

The surplus recorded in 1996 resulted from the sharp reduction in imports promoted by the new stance of stringent exchange and trade control imposed by a new administrative policy. The poor performance on non-oil export, the chronic deficit of the service account and the low level of unrequited transfer from abroad. According to Olisadibe (1995:131-155) the chronic deficit of the service account became more particularly worrisome when it is realized that in some countries the above average performance of the service account which often leaves the account into surplus position.

✓ CAPITAL ACCOUNT

The capital account excluding financing items like the current account remained weak throughout the period under review. The deficit average of 2.0 percent of Gross National product and the weakness of capital account arose from the low level of long run capital inflows in the form of the direct investment. In contrast, capital output in the form of loans, represent and short term capital movement have been substantial.

Another disturbing feature of the capital current unit is the level of portfolio investment Olisadibe (1995:131-155) portfolio investment consists of transaction in boards, debentures, none direct, investor equity, preferred shares of stocks, mutual funds and investment trusts, it includes transactions in money market instrument such as treasury bills.

The reason for the poor trend is that farfetched trading in such instrument demand sophisticated open and internationalized money and capital market with relative ease to investment and disinvestments, share of Nigeria companies for example are not quoted in international stock exchange market under such circumstance, the ability of this foreign investors take the risk of investment in the Nigeria capital and money market instrument is severally constrained. However, in recent times portfolio investment has been on the rise with the new

capitalization base drive and the creation of conducive investment environment for both foreign and direct investment.

✓ OVERALL BALANCING

Reflecting the persistent deficit of the current and capital account, the overall balance as defined earlier to exclude exceptional financing items also remained in substantial deficits throughout the period under review. The deficit average \$3085.4million annually or 25.4percent of Gross Domestic Product (Source CBN Bulletin).

✓ RESERVE MOVEMENT

Reserve are important component of balance of payment accounts basically as financing items from the windfall of the improved price of crude oil in the international market in early 1980s the country's external reserve position witnessed a high build up reaching up 10.0billion in 1980. However, this level could not be sustained owing to the crash in oil prices in 1989 and increased importation resulting in the continued depletion of external reserve. Thus, the country's external reserve position average \$1.7billion in 1988 before improving in 1992. The period of 1988-1995 witnessed an average of \$2.0million; the reserve however dropped from 1955 due to the stringent sanctions placed on Nigeria by foreign countries and multinational during the regime of the last General Sani Abacha. This trend is however reserved with transparency concept being adopted by the president Olusegun Obasanjo.

✓ NAIRA EXCHANGE RATE

The principle objective of exchange rate policy during the early years of 1980's was to check inflationary pressure. This was achieved by maintaining an overvalued exchange rate so as to encourage importation. Consequently the naira exchange rate was maintained above equilibrium level, attempts to adjust the rate in the context of a crawling peg during the subsequent periods of foreign exchange rate scarcity was hart-hearted and so could not push the exchange rate to its equilibrium. In 1986, a market driven exchange rate policy was therefore put in place to reflect the dictates of the viable balance of payment policy.

The objective were to liberalize the foreign exchange market so as to achieve realistic naira exchange rate that would allocate resource, exports and capital inflow, the institutional arrangement for achieving those objective can be known as the foreign exchange market(FEM).

The introduction of the liberalized exchange rate system resulted in a sharp depreciation naira exchange rate and average of #0.705 in 1980-1985 to a average of \$1.9251 between 1986 and 1991. However, even though as at 1991, the exchange fluctuated between #5 to #6 to the dollar, the official naira exchange rate remained overrated.

The exchange rate has been dealing in favor of the dollar ever since this has been as a result of the steadily declining exports of petroleum products has been in disequilibrium due to excess import in relation to export, the present exchange rate however fluctuates between \$1 to #150 or above.

2.3a TYPES OF UNEMPLOYMENT

Several types of unemployment exists and they are as follows

• Seasonal unemployment: Seasonal unemployment is experienced in industries whose production is affected by variation in season. At the park

of rainy seasons in Nigeria for example farming, road and house construction are temporarily suspended. During this period some workers are usually laid off. Unemployment resulting from this is called seasonal unemployment.

- Residual unemployment: This occurs mainly among the disable or mentally ill, the handicapped that are incapable of performing in any job remains perpetually unemployed.
- Structural unemployment: This result from a change in demand and it is an example of frictional unemployment. Since the fall in demand for one thing generally balanced by an increase in demand for something else. Unemployment arises mainly from lack mobility of labour and the time lag involved before an unemployment person gets employed.
- Technological unemployment: This type of unemployment is caused by changes in production technique. It is the immediate effect of the introduction of labour saving machinery, which leads to many workers becoming redundant and being automatically.
- Mass unemployment: It perhaps the serious type of unemployment since it is due to general deficiency of demand and therefore it affects nearly all industries at the same time though the capital producing industries are

more seriously affected than others. It is sometimes known as cyclical unemployment as it was associated with depression of 1929-1935.

2.3b CAUSES AND CONSEQUENCES OF UNEMPLOYMENT IN NIGERIA.

From the discussion so far, it is clear that the dynamics of unemployment have several facts being either temporal or long run (ie chronic) in nature thus, for a young school teacher, unemployment can be regarded as a temporal phenomenon depending on the type of education received and the country level of economic development. The reverse however is the case of an individual who has acquired a tertiary education and remained unemployed.

This part of the literature offers some explanations as to the cause of unemployment. In Nigeria and also possible consequences thereof, nothing in particular for that of Nigeria unemployment has received scanty attention in the existing literature.

CAUSES OF UNEMPLOYMENT

COLONIAL FACTOR: The type of economic arrangement that prevailed during the colonial days was such that could guarantee a social desirable level of aggregate employment in the short run. The colonies including Nigeria were seen and used as primary producers of raw materials for home industries of the colonial administration and on the consumption side the densely populated colonies served as rich markets for the manufactured products of foreign industries. The major thin here was that educational were several limited while no visible alternative was given to technological training for the indigenous Nigeria population.

Thus, it happened that at independence in 1960agriculture still provides the main outlet for employment for many Nigerians and this situation was unpleasant as agriculture was characterized by seasonal employment.

FAULTY INDUSTRIALIZATION POLICY: Urged by the desire to correct the ills of the colonial regime, the independence government embarked on an inward looking. Industrialization strategy of import substitution whereby some light industries were set up in the country. This scheme however; did not work out because of lack of technology and indigenous engineers who lack technological training

CONSEQUENCES OF UNEMPLOYMENT

Unemployment is generally an economic, social and political problem which must be solved or whose effects ought to be reduced to the barest minimum. This is the reason why it is emphasized on. The economic effects of unemployment are many and varied. When the economy operates at less than full employment of human and material resources the level of aggregate output would fall and as demand remains the same, an upward pressure on the general price level would occur which could encourage labour unions to press for increased wages which would in turn lead to employers to retrench workers. In addition, a situation of unemployment is an indication that resources are underutilized since prosperity of any nation is measured through unemployment rate. This will result in lower national incomes which is detrimental to national development.

Furthermore, it has been observed that social vices (e.g armed robbery) have been indicative of stress responses due to unemployment, suicides, alcoholism and deprivation are also social ills are psychological consequences of unemployment.

THE ROLE OF GOVERNMENT ON UNEMPLOYMENT

The role of government as factors in unemployment can be gauged in various ways but mainly by school enrolment programs and creation of jobs

opportunities; the government in the past formulated an educational program which is the Universal Basic Education (UBE) under which education is to be provided free of change up to a certain level. This program will go a long way in providing skilled labour in the future and easing out unemployment if executed properly.

However, there are other developments, many other states carried out mass retirement of workers in the public service and retrenchment following the federal government decision on increase the minimum wage rate in the year 2000, and this took place along with an embargo; which they placed on the recruitment of fresh workers. Another dimension was the fact that servant of those who claimed to be in paid emolument were uncertain of their monthly salaries (sometimes fall into arrears of three to five). Also in some states, the official employment policy tends to be discriminative which restricts the mobility of potential workers.

Recently the government has also introduced a program called the YouWin, which mean Youth Enterprise with innovation in Nigeria. An innovation business plan competition aimed at creating 110,000 jobs over a 4 year period to

encourage and support aspiring entrepreneurial youth in Nigeria to develop and execute business ideas.

2.4 LIMITATION OF PREVIOUS STUDIES:

The monetarist contention about the cause of inflation as being an increase in the supply of money is not entirely true, because as some economists have tried to modify it others have criticized it out rightly; it has shown that not all increase in money supply has direct and positive Import on the price level. According to Artfield (1978 :331-335) unanticipated increase in the money supply with all other factors constant, cause prices to become lower than it would otherwise have been, this statement means that anticipated increase in money supply that will have a positive relationship with price. This statement was in direct support of Adler's (1978:151-191) who discovered that expected variations in monetary expansion rate that would lead to variation.

Although the structuralist made a lot of contributions on the study of inflation, their contribution are not entirely free from flaws. Various limitation have be leveled against their theory and one of the strongest and perhaps the most articulate criticism of the structuralist interpretation has been put forward

by Lewis (Anosike and Omiri. 1981:129) the structuralist view failed to understand that some sluggishness in export growth is not really structuralist but results plainly from failure to exploit export opportunities that may still exist because of overvalued exchange rate.

Also, the structuralist have suggested that one factor reducing if not eliminating inflation in the face of rigid supply is importing to argument domestic production, however, the import has been maintained on the average by most countries, despite the decline in export revenue but even at this, there has been no inflationary increase due to their availability of imported goods.

Finally, the quantity importance of cost push generated by import substitution is exaggerated while the factors may account for a moderate inflationary pressure; they are of little use in explaining the massive and chronic inflation in less developed countries.
CHAPTER THREE

3. O METHODOLOGY

3.1 RESEARCH DESIGN

This research study centers on three basic macro-economic problems, which are inflation, unemployment and balance of payment. Hence the empirical links which exists between was analyzed.

However, it must be stated here that perhaps due to lack of literature on existing links between inflation and balance of payment more emphasis were placed on the link between inflation and unemployment. This study deals with macro-economic policy. Which in turn is concerned with the behavior of key average and aggregates such as the level of unemployment.

In this research work, the period of 1980-2010 has been chosen, that is a period of 31 years. Ordinary least square method (OLS) of regression will be adopted to estimate parameters. The choice of ordinary least square method is fairly simple as compared with other econometrics techniques and data requirements are not excessive.

3.2 Model specification

Studies on inflation, unemployment and balance of payment in Nigeria show that there is a link between them. Studies on inflation in Nigeria shows that it affects the rate of unemployment. The models of this study incorporates inflation rate (INF) ,unemployment rate (UMP)and balance of payment rate (BOP). In the first hypothesis test, inflation rate and unemployment rate are assumed to be the independent variable and they are represented by INF and UMP while the balance of payment is the dependent variable which is assumed to be (BOP). Thus, the mathematical form of the relationship is stated below.

> BOP=f(INF,UMP,EXR) BOP= $\alpha_0 + \alpha_1$ INF+ α_2 UMP + α_3 EXR + U BOP= Balance of payment INF= Inflation rate UMP= unemployment rate

EXR= Exchange rate

 α_0 = constant

 $\alpha_1 = \alpha_2 = \alpha_3 = \text{Regression coefficient}$

 μ = Error term

3.3 Method of Evaluations

3.3.1 Evaluation based on economic " a prior expectation"

This criteria is use to determine whether the parameter estimate confirm to the

economic theoretical a prior expectations.

Variables	Definitions	A prior expectation
Inflation rate	The rate at which the	Negative(-)
	general level of prices of	
	goods and services is	
	rising, and, subsequently,	
	purchasing power is	
	falling in an economy	
	over a period of time.	

Unemployment rate	It occurs when people are	Negative(-)
	without work and actively	
	seeking work.	
Exchange rate	It is regarded as the value	Negative(-)
	of one country's currency	
	in terms of another	
	currency.	

3.3.2 Evaluation based on Statistical criteria

This test is determined by statistical theory and aimed at evaluating the reliability of the parameter estimate .It includes the following:

a) Coefficient of multiple determination (R²)

This measures the percentage changes in goodness of Fit of the regression plan.

The sample observation on inflation, unemployment and balance of payment will be evaluated to obtain the estimation of the three parameters b_0 , b_1 , and b_2 . The coefficient of determination denoted by R^2 will be obtained for the hypothesis test. It is computed using the formular

$$R^{2}y, X_{1}, X_{2} = \underline{b_{i}} \underline{\sum yx_{i}} + \underline{\sum yx_{2}}$$

Σу

Where

B_i = the estimated coefficient

Yx = Product of the deviation of X and Y independent and dependent variable from their means

 Σ = summation sign

R² = the squared regression residual

The coefficient of determination can assume values lying between zero and one that is to say 0 r^2 1.

b) Student t-test: This is used to determine the significance of the individual parameter in which the calculated t-value in the regression results compared with the t-tabulated at the n-k degree of freedom and 5% level of significance. The value of t-statistical or ratio is estimated by expression

t *= b/S(bi)

where:

bi = Estimated regression coefficient

S(bi) = standard error of estimated bi

The value of computed t-ratio, t is computed with the theoretical "t" obtainable from the table and n-k degree of freedom.

c) F-test: This is used to determine the significance of the entire regression plan that is the overall significance of the parameter estimates. It aims at finding out whether the explanatory variables do actually have any significant effect on the dependent variable.

3.3.3 Evaluation based on econometric criteria.

This test is set by the theory of econometrics and it investigates whether the assumptions of the econometric method employed are satisfied or not. The test carried out under these criteria includes the test for autocorrelation, Heteroscedastic error test, Multicolenearity, Normality test.

- Test for Auto-correlation: This test is conducted to ensure that assumption of the (ordinary least square) is not violated. The Durbin Watson test will be applied.
- ii. Heteroscedasticity Error test: This is used to know whether error term of the explanatory variables of the estimated model have equal variance.

- iii. Multicolenearaity: This will be used to test the linear colonearity among the explanatory variables and correlation matrix would be employed in this test.
- iv. Normality test: The test is conducted to find out if the error terms are normally distributed with zero mean and constant variance.
 Skewness and kurtosis will be used to determine this between 0 and 1.

Decision Rule

If the observed t *falls in the critical region for explainable t*< t 0.025 or t*> t 0.025 we reject the null hypothesis and infer that bi + 0 that is we accept the alternative hypothesis. If the observed value t* falls outside the critical region c: For example t 0.025 (t*< t 0.0025). We accept the null hypothesis that is we infer that the true population parameters bi = zero.

Also, if > f 0.05 we reject the null hypothesis, that is we accept that the overall regression, is not statistically significant.

Moreover, if the d* < du or d* > (4-du), The U's are auto-correlation. If du < d* < (4-du) the U's are not correlated.

3.4 SOURCE OF DATA

The main source of data for the study will be mostly secondary since we focus on inflation contents; both past and present .It is considered necessary the use of questionnaires data will be collected from the Central Bank of Nigeria bulletin and financial reviews, federal office of statistics, National Bureau of Statistics, federal ministry of labour and productivity. Also past literature and published articles will be consulted.

CHAPTER FOUR

4.0 DATA ANALYSIS AND PRESENTATION OF RESULTS

2.2 DATE ANALYSIS:

Base on the collected data in chapter two: section 2.4 some observations was made on the trends of balance of payment, inflation, unemployment and exchange rate. It was also represented in chart form



Chart 1: BOP FROM 1980-2010

Chart 2 :UMP FROM 1980-2010



Chart 3: INF FROM 1980-2010



Chart four: EXR From 1980-2010



The tables above represents the relationship between inflation, unemployment exchange rate (Independent Variables) and balance of payments (Dependent Variable) in Nigeria for the period under review i.e. 1980-2010.

From Tables, we can see that during the period of 1986-1987, when the country introduced the Structural Adjustment Program; whose objectives included diversifying the productive base of the economy, adoption of realistic exchange rate through the establishment of Foreign Exchange Market, minimal inflationary growth rate etc, there was an improvement in the position of the country's balance of payments, i.e. the country recorded a surplus in her balance of payments position. As depicted from the table 1, during the 1986-87, as the exchange rate

of the Nigerian naira to the United States Dollars depreciated from N2.02 - \$1 to N4.02 - \$1, the balance of payments position moved from a deficit of 748.3 to a surplus of 159.2. This depreciation of the Nigerian naira will now make the exports of Nigerian products cheaper and imports of foreign goods into the economy more expensive. Thus, it will improve the nation's balance of payments position. Also, from the table, from 1994-1995, due to financial sector reforms by the Central Bank of Nigeria we noticed an increase in the money supply in the economy i.e. from N169,391.5 million to N201,414.5 million. This increase in money supply moved the country's balance of payments position from a deficit of 42623.3 to a surplus of 19531.3. This shows that monetary policy such as changes in the money supply can be used to influence the balance of payments position of the country, (Gbosi, 2001).

Nigeria also experienced all manner of inflationary episodes – from creeping to moderate and from high to galloping (see chart 3). Average inflation during the period 1980 - 1994 was relatively high, the historical average rates being 20.5, 25.4 and 35.8 percent for the periods 1980-84, 1985-89 and 1990-95 respectively. When assessed on an annual basis, however, rising prices became a cause for concern for the then civilian and military governments and extending to the

current civilian dispensation as inflation rate has almost consistently remains a double digits with exception of 1982, 1985/86, 1990, 1999/2000 and 2006/2007.

4.2 PRESENTATION OF REGRESSION RESULTS:

The results gotten from the modeling BOP by OLS is presented below.

Variable	Coefficient	Std. Error	t- value	t-prob	PartRy
Constant	6.8956e+005	6.6231e+005	1.041	0.3070	0.0386
INF	-12381.	14076.	-0.880	0.3868	0.0279
UMP	-1.4027e+005	88975.	-1.576	0.1266	0.0843
EXR	29512	8197.3	3.600	0.0013	0.3244

Table 4.1: modeling BOP by OLS

Ry = 0.500492 F (3, 27) = 9.0177 [0.0003] DW = 0.716

4.3 ANALYSIS OF THE RESULT:

4.3.1 ANALYSIS OF THE REGRESSION COEFFICIENTS:

- The coefficient of constant is 6.8956. This shows that when all other explanatory variables are held constant, the value of the balance of payment will be 6.8956.
- The coefficient of inflation is -12381. This means that a unit change in inflation will bring about a decrease in the balance of payment by 12381.
- The coefficient of unemployment is -1.4027. Thus a unit change in the unemployment rate will lead to a decrease in the balance of payment by 1.4027.
- The coefficient of exchange rate is 29512. Thus a unit change in the exchange rate will bring about an increase in the balance of payment by 29512.

4.4 ANALYSIS OF THE EVALUATION METHODS:

4.4.1 ECONOMIC APRIOR EXPECTATION

Variable	Expected sign	Observation	Remark
		sign	
INF	Negative	Negative	Confirm
UMP	Negative	Negative	Confirm
EXR	Negative	Positive	Does not
			confirm

4.4.2 STATISTICAL CRITERIA

1. The R² (Coefficient of determination):

Based on the result gotten, Ry which is 0.500492 shows that the dependent variable was adequately explained by the behaviour of the independent variables. Approximately 50% of the dependent variable was explained by the independent variables.

2. The t-test (Student t):

The t-test will be used to test for the individual significance of the variables in the model. Thus we reject H_0 that the variable is statistically significant if $t_{cal} > t_{tab}$ in absolute values (that is, ignoring negative values) and accept it if otherwise.

4.2: t- test for the model

Variables	t-value	5% critical value	Decision
Constant	1.041	2.052	Not statistically significant
INF	-0.880	2.052	Not statistically significant
UMP	-1.576	2.052	Not statistically significant
EXR	3.600	2.052	Statistically significant

3. F-test:

The F-test is used to check if the model specification in the previous chapter is adequately or well specified for forecasting and policy analysis. The decision value is to reject H_0 (null hypothesis) and accept H_1 if $F_{cal} > F_{tab}$.

Table 4.3: The F-test

$\mathrm{F}_{\mathrm{cal}}$	F_{tab} at 0.05 significant level	Decision
9.0177	2.96	Reject H_0 and accept H_1

Hence, $F_{cal} > F_{tab}$ i.e 9.0177 > 2.96 we reject H_0 and accept H_1 , concluding that the model is well specified and adequate for future forecasting and policy analysis. It further states that the overall regression is significant and statistically different from zero.

4.4.3 ECONOMETRIC CRITERIA

> Autocorrelation Test:

This test will be performed to see whether the errors corresponding to different observations are uncorrelated. In doing this, we shall use Durbin Watson test statistics.

Table 4.4: Decision Rule

Null Hypothesis Ho	Decision	IF
No positive autocorrelation	Reject	$0 < d^* < d_L$
No positive autocorrelation	No decision	$d_{L}\underline{<}d^{*}\underline{<}d_{L}$
No Negative autocorrelation	Reject	$4 - d_L \le d^* \le 4$

No Negative autocorrelation	No decision	4 . du ≤d*- dL
No autocorrelation, positive	Do not reject	du< d*< 4- du

From the result, $d_L = 1.229$, du = 1.650 and $d^* = 0.716$. d^* falls within the range $0 \le d^* \le d_L$. Therefore we will reject the null hypothesis that there is positive serial correlation in the residuals.

> Heteroscedasticity Errors Test:

Ho: Homoscedasticity

Hi: Hetroscedasticity

Decision rule is to reject Ho if $X^{2}_{cal} > X^{2}_{tab}$

 X^{2}_{cal} = 24.433 @ 6 degrees of freedom

 $X_{tab}^2 = 12.6$ under 0.05 significance level.

Since $X_{cal}^2 > X_{tab}^2$, thus we reject the null hypothesis and conclude that the conditional variance of the error term is unequal.

> Multicolenearity

From the correlation matrix below, if the pair-wise matrix is less than 0.8, we conclude that multicollinearity does not exist in the model.

	BOP	INF	UMP	EXR
BOP	1.000			
INF	-0.2585	1.000		
UMP	0.5098	-0.4580	1.000	
EXR	0.6729	-0.3270	0.8843	1.000

From the correlation matrix, the pair-wise exchange rate and unemployment are greater than 0.80. Thus, we conclude that multicollinearity exist between them.

> Normality Test:

Decision rule:

Ho: Normality (Residuals are normally distributed).

Hi: Non-normality (Residuals are not normally distributed

If $X_{cal}^2 > X_{tab}^2$, (at 2df), we reject the null hypothesis that the residual is not normally distributed.

 $X_{cal}^2 = 0.96951 @ 2$ degrees of freedom.

 $X_{tab}^2 = 5.991$ under 0.05 significance level.

Since $X_{cal}^2 < X_{tab}^2$ i.e. 0.96951 < 5.991, we accept the null hypothesis and conclude that the residuals are normally distributed.

4.5 HYPOTHESIS TESTING

HYPOTHESIS:

- H_0 : Inflation and unemployment has no effect on balance of payment in Nigeria.
- ${
 m H}_1$: Inflation and unemployment has an effect on balance of payment in Nigeria.

CONCLUSION:

The t-test result reveals that unemployment and inflation have no significant impact on Balance of payment, thus we accept the null hypothesis and conclude that unemployment and inflation have no impact on balance of payment.

CHAPTER FIVE

5.0 SUMMARY, POLICY RECOMMENDATIONS AND CONCLUSION

5.1 SUMMARY OF FINDINGS

So far, we have seen that there is a link between inflation, unemployment and balance of payment in Nigeria. The research test result confirms that there is a link between inflation and balance of payment in Nigeria. Inflation posses a negative sign according to prior expectation indicate relationship between inflation and balance of payment. This also shows that the variation in the balance of payment attributes to the variation in rate is 50% that inflation has a significant influence on the balance of payment in Nigeria. More so, this link can be explained with example. Inflation usually causes prices to rise in the domestic market. When this happens the price import becomes cheaper when compared to the goods of other countries and this leads to consumers demanding more and more of foreign goods.

As this situation continues the country uses more and more of its foreign exchange to buy foreign goods thereby reducing foreign exchange earnings from exports since the import has increased at a rapid rate. As this situation persists, balance of payment problem occurs.

A country with domestic inflation and falling export earnings will have an adverse balance of payment, it will also suffer. Its citizens will prefer foreign goods to home produce and this is the situation with Nigeria.

Furthermore, improving the balance of payment will require general increases in export and fewer imports, thereby reducing the availability of goods in the domestic market and creating the danger of the inflation excess of demand over supply. These show that there is a policy conflict between inflation and balance of payment.

There is a link and policy conflict between unemployment and balance of payment, with fixed exchange rate, a major policy conflict can occur between unemployment and balance of payment if the country's currency is overvalued so that at full employment there is balance of payment deficit because foreign investors will not be willing is to invest in Nigeria and this will reduce our export proceed; then an expenditure dampening policy will reduce imports and this alleviates the balance of payment problems , but at the cost of raising level of domestic unemployment because since demand has reduced, investors will not be willing to increase their workers in other to reduce the cost of production.

5.2 POLICY RECOMMENDATIONS

Economics has recommended that a minimum rate of inflation is necessary for growth and development of any economy. In their view inflation is the product of overly ambitions employment targets, this is because the more investors make profit the more they are motivated to invest and thereby creating employment opportunity.

Also the government should recognize the policy conflict existing between inflation and unemployment and should make sure that their monetary and fiscal policies are geared towards full employment without accommodating more inflation. Furthermore, if government at its target level; they must make sure that price expectation do not catch up with actual inflation.

More so, for government to maintain a stable balance of payment, they should encourage local and foreign investors and other to create employment opportunity for the local citizens. They can equally reduce their rate of importation of foreign goods by the use of import restriction to encourage investors by giving them investment incentives and creating a stable political and economic atmosphere for them.

Therefore, government should endeavor to foster productivity growth under price stability by greater support for science education and research in order to increase our level of technological advancement and cut down cost of production. It I certainly time to declare war on structural unemployment by providing relocation of loans to workers who want to move to area where job opportunities are more promising and supporting better basic education as well as job training to enable workers to adapt to new technology.

For further research, the researcher should be able to get hold of more information and widen the scope of his/her research. He/she should also be given more time adequate materials to be better evaluating the problem in question and proper better solution. He/she should be able to help the policy makers to find better ways to tackle the trade off problem between unemployment and balance of payment and should focus more on finding a solution for the effect on the balance of payment caused by inflation and unemployment, that is concentrate more on the problems of the balance of payment because a stable balance of payment position is the backbone of every economy.

5.3 CONCLUSION

The researcher to a reasonable extent has tried to analyze the impact between inflation, unemployment on balance of payment in Nigeria.

The hypothesis test result shows that no doubt about this links between inflation, unemployment and balance of payment and that they are negatively related to each other. The result equally shows that the effects of inflation, unemployment on balance of payment in Nigeria 50% the link are fundamental in the sense that a policy aimed at reducing inflation is capable of increasing unemployment on one hand and creating severe of payment on the other hand. Therefore, this situation leaves the policy makes worse off.

More so, this three-macroeconomic problem cannot be solved but can be minimized if the government can apply the right policy treatment to solve any of them at the right time. In addition, if government wants to avoid the policy conflict that exists between them, they should tackle these problems one after the other.

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