Introduction to the Macroeconomic Structure of Yemen

Mohamed, Issam A.W.

Department of Economics, Al Neelain University, Khartoum, Sudan

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Professor Dr. Issam A.W. Mohamed[1]

1. Abstract

In countries where tools of economic control are immature and disabled due to totalitarian systems, macroeconomic analyses for aggregate quantities and relationships, such as total consumption, investment, and government expenditures represents a difficult task. The practice of aggregation distinguishes this field of microeconomics and has advantages but also creates problems, a brief survey of these problems is required now, although a deeper appreciation of these must await the critical attitudes that can only develop with more exposure to entire subject. One difficulty is the complex area known as the aggregation problem, the classifying of widely varying goods or activities into one general category, which is treated as a homogeneous variable. The political, social and military fate of nations depends greatly upon economic success, and no area of economics is today more vital to nation's success than its macroeconomic performance. Countries like Japan which has grown rapidly by wining export markets for its products, enjoy enhanced political power and higher living standards. A country's living standards depend crucially upon its macroeconomic policies.

2. The Economic Activity

Broadly defined, any activity that uses up scarce resources can be considered as an economic variable in nature. If this is the case, then any activity that uses up scarce resources must lead to the creation of income (Anthony S.Campagna,1974). If there is some measure of satisfaction received in return. This must be the case for income defined in the larger sense, but for income defined in terms of money values, there must be some exchange, some transaction, where by the value of the activity can be

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[1] Professor of Economics, Alneelain University, Khartoum-Sudan. P.O. Box 12910-11111. issamawmohamed@hotmail.com

measured. Hereby, a problem emerges from the fact that there are mean activities which use up scarce resources and yield satisfaction (and hence income) but for which there is no observable transaction no market exchange. Therefore, in order for employ the restricted definition of income.

Macroeconomics, as was noted above is concerned with aggregate quantities and relationships, such as total consumption, investment, and government expenditures, the practice of aggregation, which distinguishes this field from microeconomics has advantages but also creates problems, a brief survey of these problems is required now, although a deeper appreciation of these must await the critical attitudes that can only develop with more exposure to entire subject. One difficulty is the complex area known as the aggregation problem, the classifying of widely varying goods or activities into one general category, which is treated as a homogeneous variable. The political, social and military fate of nations depends greatly upon economic success, and no area of economics is today more vital to nation's success than its macroeconomic performance. Countries like Japan which has grown rapidly by wining export markets for its products, enjoy enhanced political power and higher living standards (Paul Samuelson, 1992). A country's living standards depend crucially upon its macroeconomic policies. Before this century, countries had little understanding of how to combat periodic economic crises. But the revolutionary theory of John Maynard Keynes helped explain the forces producing economic fluctuation and devised an approach for controlling worst excesses of business cycle.

3. Macroeconomic Variables

The variables of macroeconomic analysis have already been indicated as including consumption, investment, the money supply, the price level, the interest rate and wage rate. In one sense, these variables are self explanatory, but closer scrutiny reveals the need to clarify them further so that they may be used properly and understood thoroughly. The first distinction to be made among these variables is whether they are stock or flow variables, this distinction is necessary because of the time element present in all economic variable. A stock variable is one that has meaning only at a specific point in time. Thus the capital stock of an economy only has meaning when expressed as a magnitude at certain time-for instance, as of December 31 2005, the capital stock of the nation was X billion of dollars. Other examples of stock variable are the money stock, inventory, savings, and population data.

In contrast, there are those variables, the flow ones that cannot be meaningfully expressed except in terms of time period. Thus, we speak of income per year, per quarter or per week; investment, consumption, and saving per quarter or year. The time period must be considered explicitly when referring to these variables, or else it makes little sense to use them. One could not say that personal income 800 billion $ without stating over what time period, this amount of income was earned, it must read 800 billion$ for the year 2005 nor does it make sense to refer to the stock of income. On the whole, the distinction between stock and flow variable is clear although there are times when failure to remember it can lead to errors. The analyzing macroeconomics, we always encounter a few key mean-variables – the most important being Gross National Product (GNP), the unemployment rate, inflation and net export. These are the central measures by which we judge macroeconomic performance.

Table (1) Major goals and instruments of macroeconomics policy

Objectives	Instruments
- Output High level Rapid growth rate	- Fiscal policy Government expenditure Taxation
- Employment High level of employment Low involuntary unemployment	- Monetary policy Control of money supply Affecting interest rates
- Price level stability With free market	- Foreign economics Trade policies Exchange policies Intervention
- International trade Export and import equilibrium Exchange rate stability	- Incomes policies From voluntary wage-price guidelines to mandatory

The left hand column displays the major goals of macroeconomic policy. These goals can be found in national lows and in the statements of political leaders. The right hand column contains the major instrument or policy measures available to modern economics. These are the ways that policy makers can affect the pace and direction of economic activity. To evaluate the success of an economy's overall performance economists look at four areas: output, employment, price stability and international trade. The ultimate objective of economic activity is to provide the goods and services that the population desires. What could be more important for an economy than to produce ample shelter, food, education and recreation for its people?

The most comprehensive measure of the total output in an economy is the gross national product (GNP). GNP is the measure of the market value of all final goods and service which are produced in a country during a year. There are two ways to measure GNP. Nominal GNP is measured in actual market prices, real GNP is calculated in constant or invariant prices (Karl E, Case,1992).

4. High Employment, Low Unemployment

The next major goal of macroeconomic policy is high employment, which is the counterpart of low unemployment. People want to be able to find good, high paying jobs without searching or waiting too long. Unemployment rate is the percentage of the labor force that is unemployed. The labor force includes all employed persons and those unemployed individuals who are seeking jobs. It excludes those without work who are not looking for jobs. The unemployment rate tends to move with the business cycle: when output is depressed, the demand for labor falls and the unemployment rate increases unemployment reached epidemic proportions in the great depression of the 1930s, when a quarter of the work force was idled. While the nation has avoided another great depression, over the last two decades there has been a marked up .world drift in the fraction of the labor force that is unemployed. The goal of ensuring good jobs for all who want them has proven increasingly elusive.

The third macroeconomic goal is to maintain stable prices within free markets. In a free market prices are determined by supply and demand to the maximum possible extant, and government abstain from controlling the prices of individual goods. Only by allowing firms to set prices freely we can ensure that the market will channel resources to their most effective use. The second part of this goal is preventing the overall price level from rising or falling rapidly. Why is price stability desirable? A

market economy uses prices as a yard stick changes rapidly during periods of rising prices, people become confused, make mistakes, and spend much of their time worrying about the value of their money. Rapid price changes lead to economic inefficiency. The most common measure of the overall price level is the consumer price index popularly known as the CPI. The CPI monitors the cost of a fixed basket of goods (including items such as food, shelter, clothing, and medical care) bought by the typical urban consumer. The overall price level is often denoted P. we call changes in the level of prices the (rate of inflation) which denoted the rate of growth or decline of the price level from one year to next.

Rate of inflation of consumer price (in percent) =

CPI (this year) – CPI (last year)/CPI(last year)

Most nations seek a golden mean of price flexibility often tolerating a gentle inflation as the best way to allow the price system to function efficiently.

5. International Trade

Finally, most countries strive to participate fruitfully in international trade so as to raise the living standards of their citizens. They import and export goods, services, and capital, they borrow from or lend money to foreigners. They imitate foreign technologies or sell new products abroad. Their people travel to all parts of the world for business and pleasure. And so on for the long term. Nations generally strive to keep imports and exports in balance. The numerical difference between the value of country's export and the value of its import is called net exports ; that is net exports equal the value of export minus the value of import , when net exports are positive, a trade surplus exists. A trade deficit occurs when the value of imports is greater than the value of exports. The goal of expounding international trade has become increasingly important as the nations of the global have witnessed gains from international trade in spurring efficiency and raising economic growth. As the costs of transportation and communication links have declined, these international linkages have become tighter than they were a generation ago. International trade has replaced empire building and military congest as the surest road to national wealth and influence some economics today trade over half their output. A major part of our discussion of macroeconomics will be concerned with the potential role of government in influencing the economy. Here we mention briefly four kinds of policy that government has used to influence the macroeconomic.

One of the major ways in which the government affects the collects taxes from household and firms and spends these founds on various items. Both the magnitude and composition of these taxes and expenditures have a major effect on the economy. Government decisions about taxes and expenditures are called (Fiscal policy).

One of Keynes's main ideas in the 1930s was that fiscal policy could and should be used to stabilize the level of output and employment in the economy. More specifically, Keynes believed that the government should cut taxes and/or rise spending-so- called expansionary fiscal policy- to get the economy of slump.

Taxes and spending are not the only variables that the government controls, however, through the Federal Reserve, the nation's central bank; the government can determine the quantity of money in the economy. The effects and proper role of (monetary policy) are among the most hotly debated subjects in macroeconomics. Most economists agree that the quantity of money supplied affects the overall price level, interest rates and exchange rates, the unemployment rate and the level of output. The main controversies arise regarding how monetary policy manifests itself and exactly

how enlarge. Although monetary and fiscal policies are two major tools that the government uses to control economy. Other instruments are also available. (Income Policies), for example, there are direct attempts by government to control prices and wages. They generally take the form of regulation specifying the maximum amount by which prices or wages are permitted to rise. Sometimes, voluntary guidelines are used instead of rigid controls. The governments may simply plead with firms and labor union to show restrain in their price and wage sitting behavior. The efficacy of wage and price controls is point of some controversy. More recently, some economists advocated supply-side policies for managing the economy. They reject the Keynesian notion that the government should act to stimulate aggregate demand; they focus instead on an aggregate supply and an increasing production. In practice the main instruments of supply side policy has been the tax system. In this sense, supply-side policy is just special case of fiscal Policy.

As economists, increase attention to international economic policy. The major instrument fall into two categories, the first is trade policies, which consist of tariffs quotas, and other devices that restrict or encourage imports and exports. Most trade policies have little effect on macroeconomic performance, but from time to time, as was the case in the 1930s, restrictions on international trade are so severe that they cause major economic dislocations, inflations, or recession. A second set of policies specifically aimed at the foreign sector is exchange market management. A country's international trade is influenced by its exchange rate, which represents the price of its own currency in terms of the currencies of other nations. Nations adopt different systems to regulate their foreign exchange markets. Some systems allow exchange rates to be determined purely by supply and demand; others set a fixed exchange rate against other currencies. In addition, central bankers and political leaders increasingly gather to coordinate their macroeconomic policies. Since 1975, the leaders of the major industrial countries have met annually at economic summit meetings to discuss point economic issues and to take appropriate measures for attaining commonly agreed upon goals. Such meetings have dealt with a wide variety of concern ranging from coping with oil price increases to studying global environmental problems.

6. Aggregate Supply and Demand

Let's begin with a simple picture forces operating on the macroeconomics, the major variables affecting the macroeconomic system. First the instruments or policy variable: taxes, monetary policy, and so forth. In addition, a set of external variables, which influence economic activity but are unaffected by the economy. These variables include wars and revolutions, the weather, population growth, and many other factors. The policy and external variables interact to determine the key macroeconomic variables (Paul, W, 1989). instruments and external variables determine national output, employment and unemployment, the price level, and net export. How do different forces interact to determine overall economic activity? First we separate policy and external variables into two categories: those affecting aggregate supply and those affecting aggregate demand. Dividing variable into these two categories is essential for our understanding of what determines the level output, prices, and unemployment. Aggregate supply refers to the total quantity of goods and services that the nation's businesses are willing to produce and sell in a given period. Aggregate supply depends upon the price level, the productive capacity of the economy, and the level of costs. In general, businesses would like to produce at full capacity and sell all their output at high prices. However, in certain circumstances,

prices and spending levels may be depressed, so businesses might find that they have excess capacity. Under other conditions, such as during a wartime boom, factories may be operating at capacity as businesses scramble to produce to meet all their orders. That aggregate supply depends on the price level that businesses can change as well as on the economy's capacity or potential output. But what determines potential output? Potential output is determined by the availability of productive inputs (labor and capital being the most important) and the efficiency with which those inputs are combined. National output and the overall price level are determined by the twin blades of the scissors of the aggregate supply and demand. The second blade of the scissor is aggregate demand, which refers to the total amount that different sectors in the economy willingly spend in a given period. Aggregate demand is the sum of spending by costumers, businesses, and other agents and depends on the level of prices, as well as on monetary policy, fiscal policy and other factors. In other words, aggregate demand measures total spending by all the different entities in the economy. It depends upon cars, food, and other consumption goods bought by consumers; on plants and equipment bought by businesses; on smart bombs and computers bought by government; and on net exports. Total purchases are affected by the prices of goods offered, by external forces and by government policies.

A macroeconomic equilibrium is a combination of overall price and quantity at which buyers nor do sellers wish to change their purchases, sales, or prices. The overall macroeconomic equilibrium, determining both aggregate price and output, comes where the aggregate supply and aggregate demand curves intersect. At the equilibrium price level, purchasers willingly buy what businesses willingly sell. Equilibrium output can depart from full employment or potential output. The analysis and explanation of economic fluctuations has been greatly advanced by the study of systems of equations connecting economic variables. The construction of such a system is a task in which economic theory and statistical method combine. Broadly speaking, considerations both of economic theory and of statistical availability determine the choice of the variables. Economic theory predominates in the definition of the "behavior equations" describing a certain type of economic decisions taken by a certain category of economic agents,

7. Dynamic Economics

Economic dynamics are concerned with fluctuations in the economy. Most economic variables, such as gross domestic product (GDP), production, unemployment, interest rates, exchange rates and stock prices, exhibit perpetual fluctuations over time. These fluctuations are characterized by sustained growth of production and employment as well as large oscillations in relative changes or growth rates. The fluctuations vary from fairly regular business cycles in macroeconomic variables to very irregular fluctuations for example in stock prices and exchange rates, in financial markets. In this note we discuss some approaches to the theory of economic fluctuations, emphasizing the role of non-linear dynamic models (Cars Hommes ,2004). In contrast to many dynamic phenomena in natural sciences, uncertainty always plays a role in an economy, at least to some extent. Therefore a purely deterministic model seems inappropriate to describe fluctuations in the economy, and a stochastic dynamic model is needed. Nevertheless, a key question in economic dynamics is whether a simple, nonlinear dynamic model can explain a *significant part* of observed economic fluctuations.

Macroeconomists now routinely use dynamic models to answer quantitative questions (Fernandez, 2004). A large set of dynamic macroeconomic models can be written in the following state space form. First, the equilibrium of the economy is characterized by some states S_t that change over time according to the following transition equation:

$$S_t = f(S_{t-1}, W_t; \gamma),$$

Where $\{W_t\}$ is a sequence of exogenous independent random variables and $\gamma \in Ч$ is the vector of parameters of the model.

Second, the observables y_t are a realization of the random variable Y_t governed by the measurement equation:

$$Y_t = g(S_t, V_t; \gamma),$$

Where $\{V_t\}$ is a sequence of exogenous independent random variables. The sequences $\{W_t\}$ and $\{V_t\}$ are independent of each other. Along some dimension the function g can be the identity mapping if a state is directly observed without noise. To summarize our notation: S_t are the states of the economy, W_t are the exogenous shocks that affect the states' law of motion, Y_t are the observables, and V_t are the exogenous perturbations that affect the observables but not the states.

The functions f and g come from the equations that describe the behavior of the model: policy functions, laws of motion for variables, resource and budget constraints, and so on. Dynamic macroeconomic models do not generally admit closed-form solutions for those functions. Our algorithm requires only a numerical procedure to approximate them.

To fix ideas, we now map $\{S_t\}$, $\{W_t\}$, $\{Y_t\}$, $\{V_t\}$, f, and g into some examples of dynamic macroeconomic models. Consider first the example of the neoclassical growth model. The states of this economy are capital and the productivity level. Assume that our observables are output and labor supply, but that labor supply is measured with some noise. Then S_t will be capital and productivity, W_t the shock to productivity, Y_t output and observed labor supply, V_t the measurement error of labor, f the policy function for capital and the law of motion for technology, and g the production function plus the policy function for labor augmented by the measurement error. Consider also an economy with nominal rigidities in the form of overlapping contracts. This economy experiences both productivity and money growth shocks, and we observe output and inflation. Now, the states S_t are the distribution of prices, capital, money, and the productivity level, W_t includes the shocks to technology and money growth, Y_t is output and inflation, V_t is a degenerate distribution with mass at zero, f collects the policy functions for capital and prices as well as the laws of motion for technology and money growth, and g is the aggregate supply function and the Phillips curve. Many more examples of dynamic macroeconomic models can be fitted into this state space formulation.

8. Macroeconomic of Yemen

During the last 15 years, the Yemeni economy passed through three stages. The first from 1990-1994. This period had been characterized by a recession and low rates of economic growth due to fiscal and monetary imbalances resulting from the political squabbling that led to the outbreak of the 1994 war for defending unity. The Gulf War of 1991 had also negative economic impacts with the repatriation of approximately one million Yemeni emigrants from the Gulf States. This led to declining remittances which the Yemeni economy depended on. The second phase, from 1995-2000. This

period had been characterized by improving economic performance and higher growth rates in view of the Government's action in implementing a package of reform policies including liberalizing the exchange rate and trade, and the gradual lifting of subsidies, etc. The reforms brought about significant transformation in economic policies. Yemen also adopted a free market approach. The private sector was designated to play the major role in the economy. The third stage (2001-2005). This period focused on alleviating poverty, curbing unemployment, carrying forward administrative reforms, good governance, administrative and financial decentralization and maintaining commitment to transparency and fighting corruption. In the first half of 1990s the economy of Yemen had been confront deterioration in most of the productive sectors. Hence, the non-oil GDP falling back and also the gross national production recorded an absolute decline from 9.086 million dollars in 1990 to 5.461million dollars in 1994.

Chart (1) GDP 1990-1994
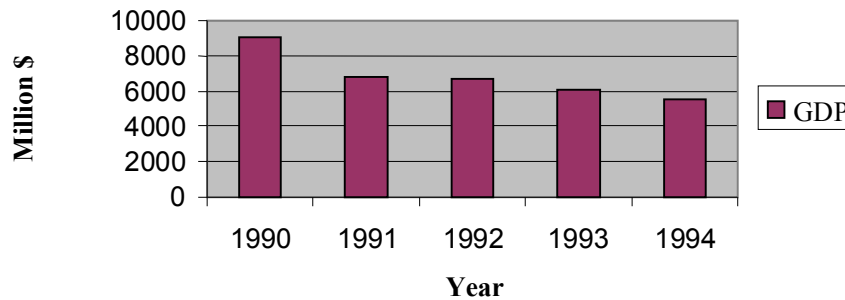
These changes were causation to falling back the share of individual from gross national production about 706$ in 1990 to 372$ in 1994. Further, the unemployment and inflation were increased too. In that time a deficit of budget came up to 14.9% of GDP in 1994.

Chart (2) budget deficit %from GDP

	1990	1991	1992	1993	1994
Deficit	-9.5077445	-4.0240943	-12.565717	-13.52155	-14.928677
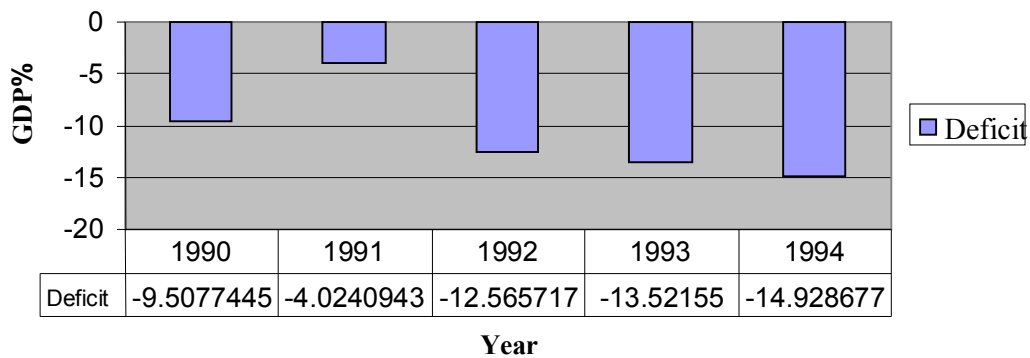
The government capitalized that deficit from central bank which used the interpolation in monetary supply to treat this defectiveness. That policy created an improperly increase in the monetary supply. Also the trade balance recorded a large deficit during that period of approximately 709.7 million dollars in 1994 while, the oil export was increase. That situation reflect a debility of exports base where the oil exports are 90% of total exports and a big dependence for imports side, especially

food imports. In the same time, disability of government to service an external debt which accumulated from vogue period the government decided committing the defecting debt from local sources, and external indebted of government became bigger than local indebted. The external indebted is 177% of the gross national production versus 52% for the local indebted in 1994, where the service of external debt is increased from 28% from fruit of the export in 1990 to 52.8% in year 1994. The evolutions of economy and politics in Yemen during the period 1990-1994 did not support the economic growth, so the average of GDP growth in this period was 4.1% while the average of population growth was 3.7% that's mean the growth of GDP was not improved the individual lived. Also a gap of the gross demand became 28.6% from GDP in 1993 versus 5.7% in 1990. Although the main reason of budget deficit (as proportion from GDP) during years 1990-1994 was decline of a public revenues, the deterioration of the commonalty finance is increased, with decline of the invective expending to 3.4% of GDP and 12.4% of public expenditures in 1994. Therefore the public budget in that period became (budget of current expenditures).

**Chart (3) Percentages of total state's expenditures**
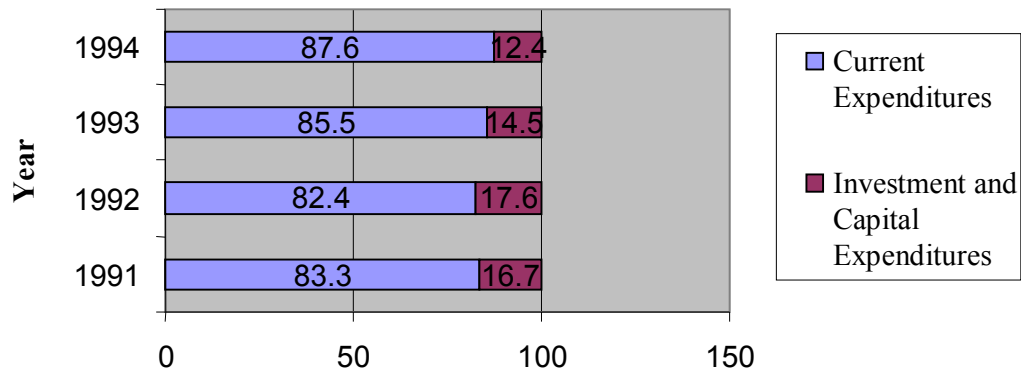
Where the wages and salaries was the biggest item in public expenditures 57.1%, 56.9%, 59.3%, 55.8% of total state's expenditures in 1991,1992,1993,1994 consecutively, because a size of labor force in administrant set of *res publica* were big, and it has high growth averages. The increase in size of employees which grown up about 13.9% lead to decrease the annual growth average of wages to 11.3% (with accompanist inflation average about38%). all of that led to change a pooling of economics sectors in GDP. it was decline of agricultural sectors from 24.2 %from GDP in 1990 to 22.6% in 1994, versus increment in pooling of manufacturing (with fining oil) from 9.3% in 1990 to 13.9 in 1994, and constancy of mining and quarrying at 13.6% from GDP during that period, although a big increment in oil production because the price of oil was fell.

In March 1995 the Yemeni government began to correct all fundamental deficiencies through reforms that set out the economic, fiscal, monetary, and other policies, to overcome the crisis faced in the early 1990s and to establish a more stable environment for development. The national economy showed better performance during a period 1995-2000. GDP grew from $ 5,110 million in 1997 to $8,532 million in years 2000, while per capita GDP rose from YR 32,092 to YR 75,276 over the same period. This is a reflection of the changes in the economy and the consequence of a 13.9% growth for the period and an average growth of 4.4%. The period also

showed a relative stability in the value of the national currency (from YR 129.3 for $1 to YR 161.7) declining at about 7.7%. This helped in controlling inflation which continued at single digit rates not exceeding 8.2% during the same years. Likewise, the per capita GDP in dollars showed an 11.5% improvement during the period, by an average of 3.7%. Growth of the national economy has been affected by the path and development of the oil sector, which fluctuated according to international demand for crude oil and changing world prices. Domestic oil production rose from 346 thousand barrels per day in 1996 to 436 thousand barrels per day in 2000.

Chart (4) oil production and oil price 1996/2000
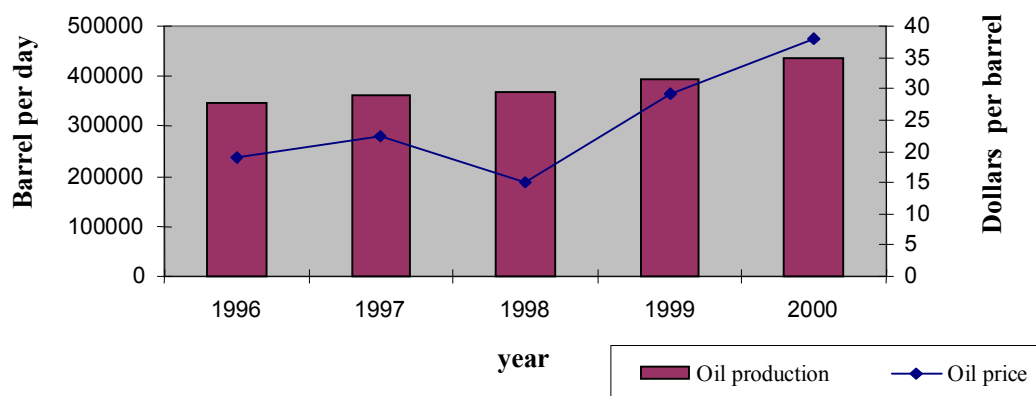
Crude oil extraction has achieved an average increase of 5.2 %, thus exceeding that of the GDP over the same period.

Table (2) Gross domestic products (1995-2000)

Item	1995	1996	1997	1998	1999	2000
GDP(bn YR)	511	736	889	849	1133	1380
GDP(mn $)	5,11	5,7415	6,875	6,251	7,272	8,532
Per capita GDP YR $	32,092 321	41,659 325	53,802 416	49,697 366	63,990 411	75,276 465

Source: Human Development report 2000/2001, Ministry of Planning and Development in the republic of Yemen.

Economic growth depends, to large extent, on the investment rate. In- spite of the latter attaining a large increase (in current prices) reaching almost 75%, its share shrank from 22.1% of the GDP in 1995 to 19.2% in the year 2000. Statistics show that the GDP goes mostly to final consumption, which is one of the most important structural deficiencies in the economy, and a constraint on the possibility of achieving growth in the future. Also, despite the growth of private final consumption by about 86 % during the same period, its percentage of GDP has been reduced from 83.8% to 57.8% in favor of total investments and exports of goods and services; thus mirroring the effect of economic stabilization on curtailing total demand, especially the consumer demand.

Table (3) Uses of the GDP (%)

Item	1995	1996	1997	1998	1999	2000
Total consumption	98.3	78.9	77.5	82.5	81.8	71.8
Public consumption	15.5	13.2	13.1	14.7	13.8	14.1

Privet consumption	83.8	65.6	64.3	67.8	68.0	57.8
National saving	17.9	25.3	25.1	21.7	17.5	24.1
Total investment	22.1	23.2	24.9	32.6	24.6	19.2
GDP(YR bn)	511	736	889	849	1,133	1.380

Same source

The Yemeni economy was adversely affected during 2001-2005 due to local, regional and international developments topped by the tragic event of 11/9/2001 and the invasion of Iraq. These factors have had an impact on economic performance. GDP grew by an average of 4.144% (constant prices 1990=100) during the period 2001-2005, where average non-oil growth was 5.27%.

Table (4) Economic Growth Rates At Current and Constant Prices (Percentages)

Year	At Current Price			At constant Price 1990=100	
	GDP at Market Price	Non-Oil GDP	National Disposable Income	GDP at Market Price	Non-Oil GDP
*2001	7.92	16.05	7.4	4.99	5.92
*2002	12.46	14.02	11	3.49	4.06
*2003	14.94	14.34	12.6	3.77	4.88
**2004	17.20	15.37	13.4	3.87	5.42
**2005	18.86	17.46	18.97	4.60	6.07

Source: Central Statistical Organization

The Government was able to achieve a budget surplus of 2.4% in 2001 and control the deficit at safe levels of no more than 3% of GDP in other years. During this period, the Central Bank of Yemen maintained stability in the exchange rate by means of imposing controls, and increasing transparency in setting the rates in accordance with market mechanisms in order to ensure a real exchange rate based on competition. The monetary policy was able to confine the growth of change in money supply at 10.2% and inflation rate at 11.8 in 2005.
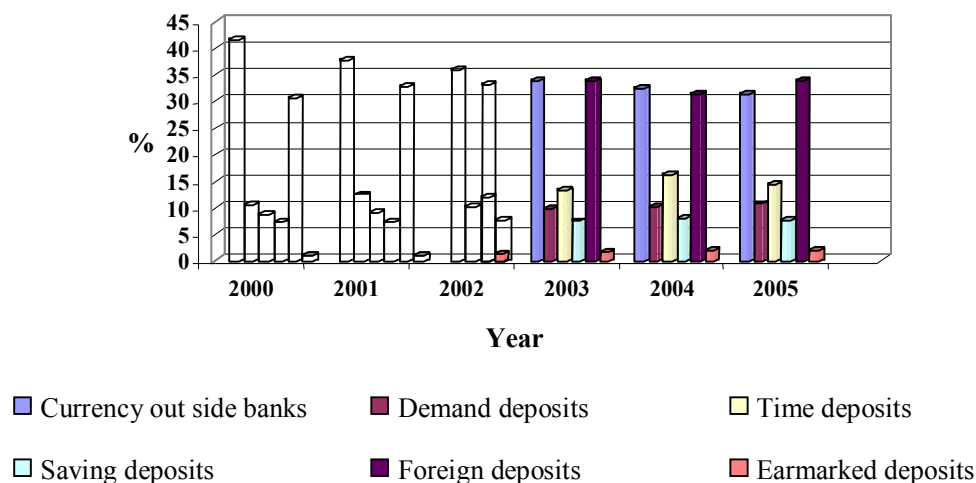
Chart (5) Growth of change in money supply and inflation rate 2000-2005
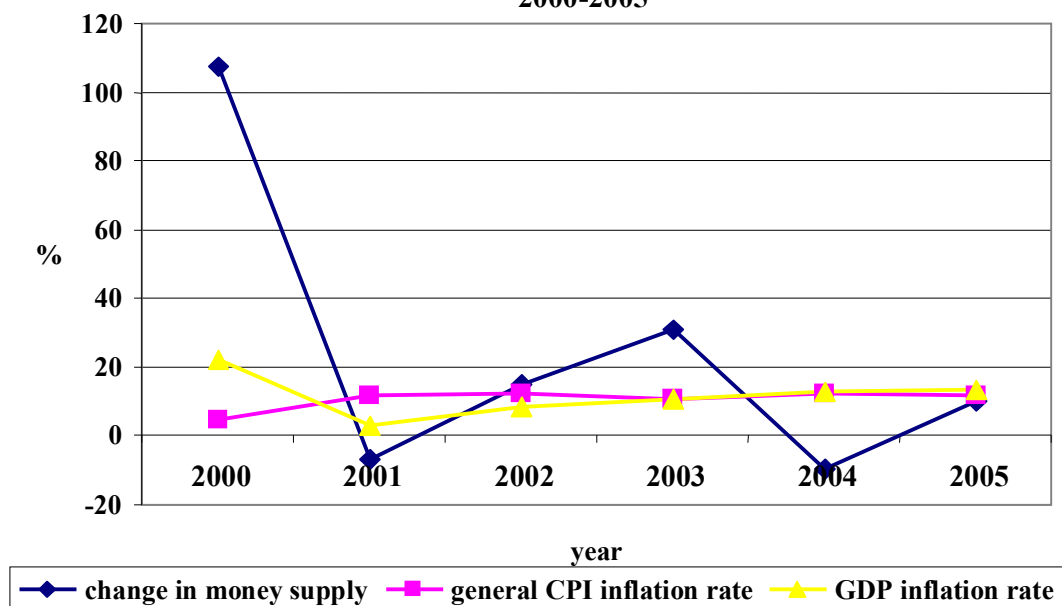
Source: Central bank of Yemen

Money in circulation outside the banking system was reduced from 37% in 2001 to 31.5% in 2005. This reinforces the confidence of banks and their ability to attract deposits and savings, and re-lend them to sectors and development projects. Foreign currency reserves rose to $ 5.7 billion by end of 2005 covering about 13 months of imports.

**Chart (6) Ratio of Money and Quasi money to Money supply 2000/2004**

Legend:
- Currency out side banks
- Demand deposits
- Time deposits
- Saving deposits
- Foreign deposits
- Earmarked deposits

Source: Central Bank of Yemen, Monthly Bulletin (April 2005).

Surplus in external balances fluctuated according to oil prices movement in the international market. The trade balance maintained a surplus ranging between $ 766.5 million and $ 936.8 million during 2001–2005. The gross balance of payments fluctuated between $ 653.2 million and $ 584.4 million during the same period. Outstanding external debt went down to 33% of GDP by the end of 2005.

9. The Structure and Features of the Yemeni Economy

The Yemeni economy has primarily depended on agriculture. Agriculture and fisheries contributed 24.2% of the GDP in 1990 followed by government services (16.1%), extracting industries (14.1%) and transport, storage and telecommunication (15.3%).

Chart(4-7) Agriculture % from GDP at current prices for 1990-2005
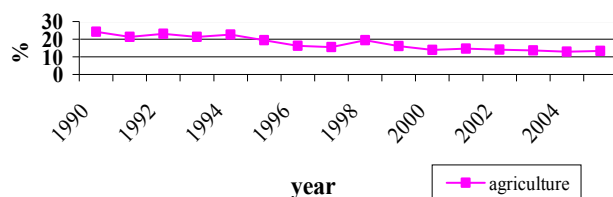
Source: Statistical Year- Books 1995-1997-2000-2003-2004

Other sectors topped by manufacturing industries including oil refining (9.6%), wholesale and retail (6.8%) financial institutions, real-estate and business services (5.7%), construction sector (2.7%) and the remaining percentage for other sectors.

The Agriculture and Fisheries sector has seen increasing development in agriculture, plantation, livestock and fishing activities but in total production we have seen a decrease in ratio of agriculture to GDP from 24.2% in 1990 to 13.33 in 2005 . Crop production constituted 66.4% of total agriculture produce where cereals occupy most of the cultivable land. Major agriculture crops include grapes, bananas, dates, cotton, tobacco and coffee. Livestock production constituted 21.5. The cultivable land is around 1,669 thousand hectares, where 67.8% is cultivated of which 35% is rain fed. Irrigated land through wells is 30% and 17% through water streams. Fish production constituted the remaining (12.1%) of good quality fish. Yemen enjoys a coastline spanning 2,500 kilometers along the Red Sea, the Gulf of Aden and the Arabian Sea. Such vast stretch of sea line provides Yemen with diversified fisheries resources of 350 types of fish and marine life. The water surface area (area of territorial waters) of Yemen reaches more than $700,000km^2$ underlying the importance of fisheries as a primary resource for the national economy and job opportunities, poverty alleviation and attracting internal migration towards the coastal areas. The fisheries sector is accorded the attention and support of the Government, and hence had led to higher rates of growth reaching 20%.Yemen ranks 4th among Arab countries in the production of fisheries. Yemenis production of crude oil increases throughout the period 1990/2004 although it was decrease in growth rate during 2001/2005.

Chart (8) Oil Production and Growth Rate of Production 1990–2005
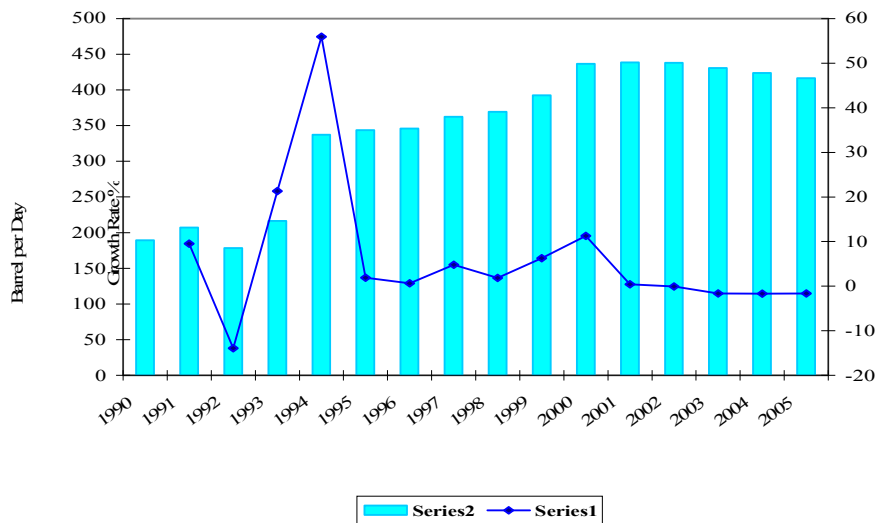
Source: Oil ministry of Yemen, Statistical Year Book 2004

Yemen was not a member of the Organization of the Petroleum Exporting Countries (OPEC) and was, therefore, not subject to OPEC's production quotas. Total value of crude oil exports in 2005 amounted to US$5952 million, forming 93.0% of the total value of exports.

13

Chart(4-9) Total Export and Oil Export during 1990-2005
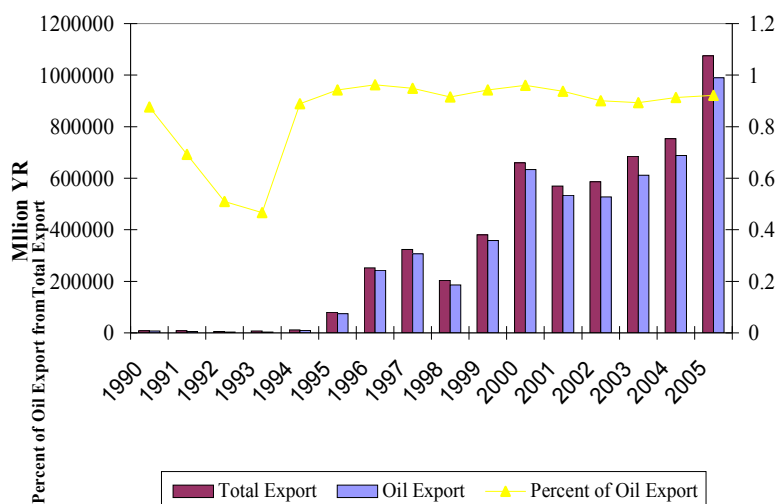

Source: Central Bank of Yemen

Crude oil exports increased from US$4303.2 million in 2004 to US$5952 million in 2005, i.e. an increase of US$1648.8 million, or 38.3% over last year, basically attributed to the increase in international oil prices. On excluding the share of oil companies, Government's share of crude oil increased by 37.9% from US$2259.2 million in 2004 to US$3114.9 million in 2005, attributable to the rise in average export prices from US$36.6/barrel to US$51.5/barrel, despite the slight decrease of exported quantities from 169 thousand barrels per day to 166 thousand barrels per day(CBY,2006).. The quantity of oil exported in 2005, however, was 2% lower, in the region of 60.5 million barrels. Oil revenues, as expected, have played a crucial role in the growth of GDP, the expansion in national income and the stimulation of economic activity in the country.

10. Foreign Trade

Foreign Trade statistics between Yemen and the rest of the world during 2005 showed a positive development despite regional and international uncertainties.

Trade balance surplus amounted to YR142950.3 million. an increase of YR125887.5 million during 2005, compared with a surplus of YR17062.8 million last year. This is attributable to the increase of exports at higher pace than imports. Exports and re-exports during 2005 amounted to YR1074549.4 million. an increase of YR320953.5 million or 42.6% compared with a 10% growth last year. Total exports grew by 42.2% amounting to YR 1040657.9 million, attributed to the increase of the exports of oil and its products as a result of the increase of international oil prices. Imports during 2005 increased by YR195066.1 million or 26.5%, compared with an increase of YR62404.7 million or 9.3% during 2004.

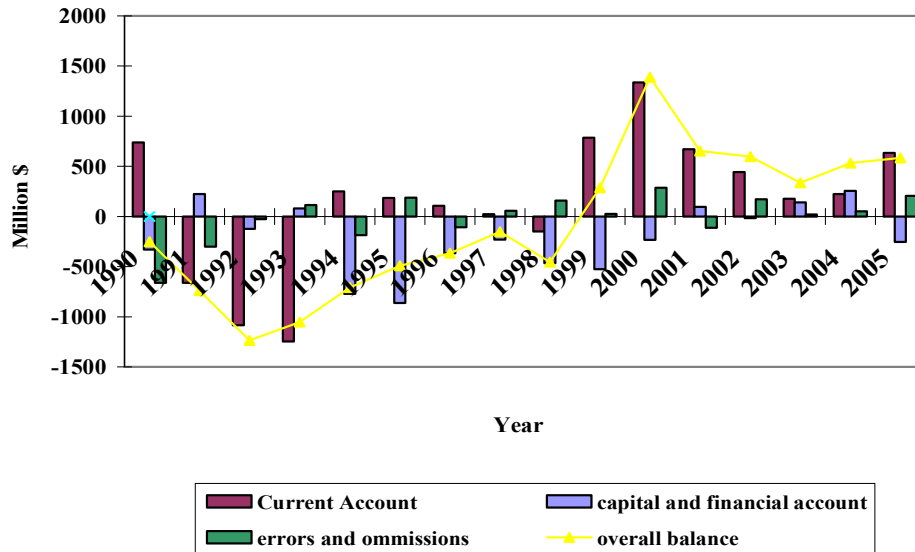**Chart (10) Blance of Trade during 1990-2005 in million YR**
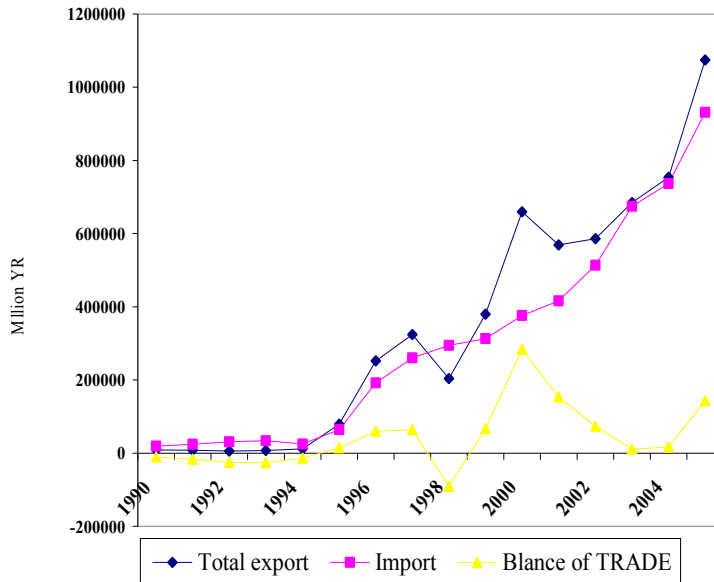
11. Balance of Payments

Preliminary data of 2005 indicate that the overall balance of payments realized a surplus of US$584.4 million, against a surplus of US$532.3 million in 2004. The ratio of the overall surplus to GDP amounted to 3.7% in 2005, against 3.9% last year.

The surplus in the Balance of Payments is attributed to the surplus in the current account, which amounted to US$633.2 million in 2005, against US$224.6 million last year. The ratio of the current account to GDP increased from 1.6% to 4.1% during the same period. On the other hand, surplus in trade balance increased from US$817.1 million in 2004 to US$1700.3 million in 2005, attributed to the increase in crude oil exports as a result of the increase of oil prices in the international market. Ratio of this surplus to GDP during 2005 amounted to about 10.8%. Imports increased by 22.1%, from US$3858.6 million in 2004 to US$4712.9 million in 2005, to meet consumption and investment needs. However, most ratio of import value goes to thirty imported commodity, important one is a gas oils, food, Live Animals and Manufactures Classified by Materials. Deficit in services balance increased by 24.7% and in income balance by 19.8%. Current transfers (net) decreased by 2.6%. The capital account moved from a surplus of US$255.1 million in 2004 to a deficit of US$253.5 million in 2005.

Chart(4-11) Overall Balance for Balance Payments for 1990-2005

Legend:
- **Current Account** (dark red)
- **capital and financial account** (purple)
- **errors and ommissions** (green)
- **overall balance** (yellow line)

Source: central bank of Yemen 2005

Gross domestic product at constant market prices increased by 4.6% in 2005 compared with 3.9% in 2004. Real non-oil GDP expanded by 6.1% in 2005, compared with 5.4% in the previous year earmarked to the regional developments and the reform policy adopted. As a result of the increase in the GDP deflator by 13.6%, GDP at current prices expanded by 18.9% in 2005 compared with a rate of 17.2% in 2004. At constant prices, the personal and social services sector grew by 18.7% in 2005. It is still the highest among all the sectors of the economy with 0.7 percentage points increase over 2004 growth. The next highest growth rate 9.9% was achieved by the electricity, water and gas sector compared with 8.1% in 2004. The manufacturing industry sector achieved a substantial growth of 8.8% against 3.7% in 2004. Despite of the retraction of the transport and communication sector from 10.3% in 2004 to 7.5% in 2005, it achieved progress in its relative share compared to other sectors. Trade, restaurants and hotels sector registered a growth rate of 6.8% compared with 6.0% in 2004 attributable partially to the improvement in the tourism industry. Next come the real estate and financial services sector with growth rate of 6.7% in 2005 compared with 3.6% in 2004. The agricultural and forestry sector achieved a growth of 6.3%. It was higher than the previous year's growth rate of 3.1% attributable to the positive effects of rain falls on the agriculture sector. The government services grew to 4.3% in 2005 against 4.0% in 2004. The activities of non-profit making enterprises realized a minor growth of 0.12 percentage points over 2004 growth rate. The construction sector growth rate retracted from 6.7% in 2004 to 2.7% in 2005. The performance of the household sector improved achieving 1.5% growth compared with 0.9% in 2004. The extracting industry performance realized minor improvement. Its retraction rate declined from 4.6% in 2004 to 4.4% in 2005 attributable to decline of output, despite price increase in international oil market. Taking into account that net
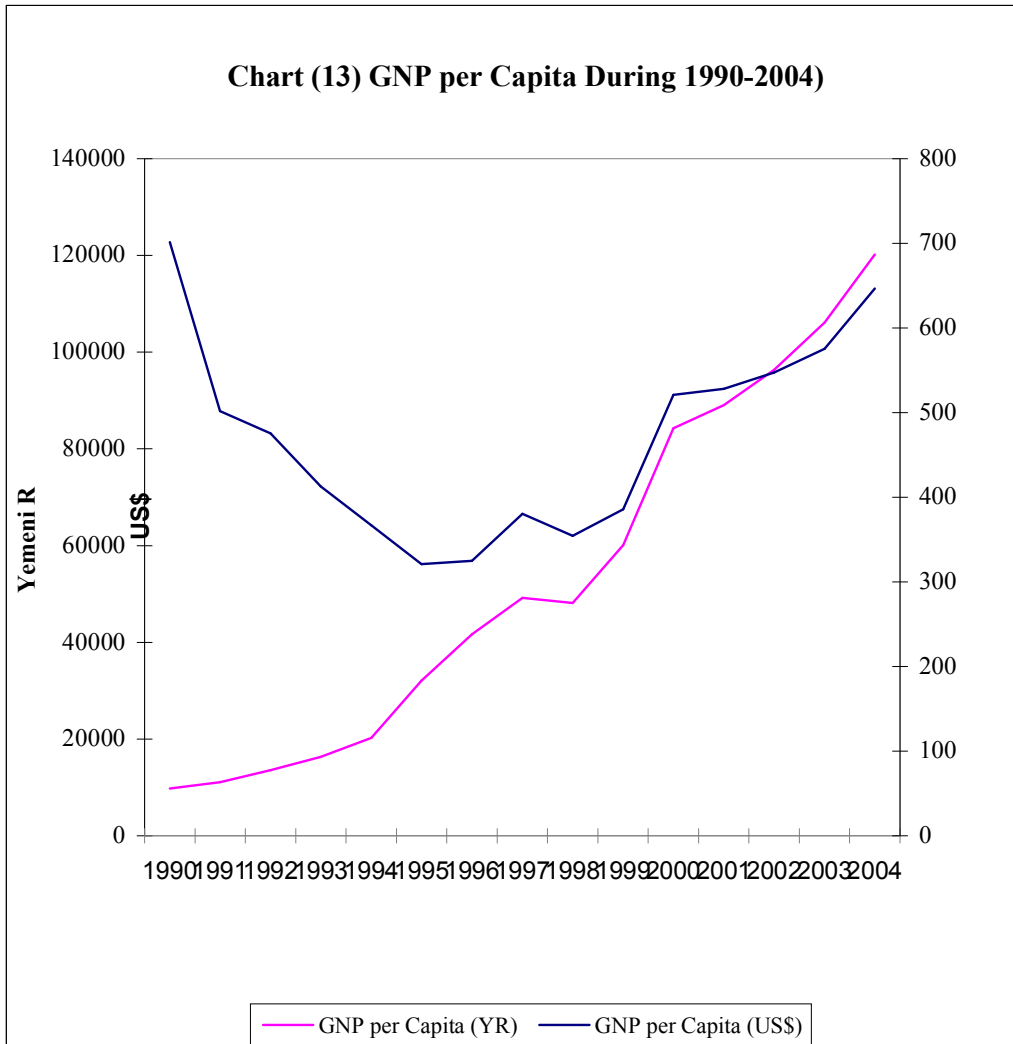
factor income from abroad registered a negative figure of YR 239 billion in 2005 against YR 214 billion in 2004, gross national product at current market prices increased by 19.5% in 2005 compared with 16.8% in 2004. As a result of the increase in net current transfers from the rest of the world by YR13.0 billion or 4.9% in 2005, disposable gross national income at current prices rose by 19.0% in 2005 compared with 13.4% in the previous year. National savings from disposable gross national income increased by 17.8% in 2005 compared with a retraction of 3.3% last year.

Chart (12) GDP and Growth Rate at Constant- Current prices
1990-2005
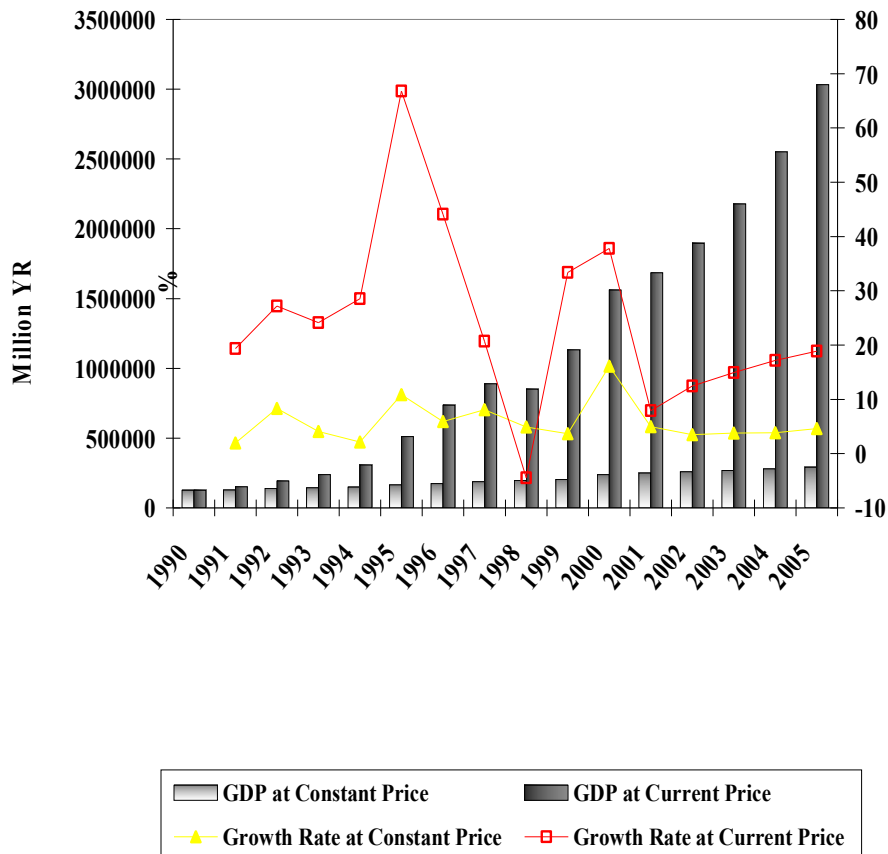
Source: Statistical Year – Book 1995-1997-2000-2003-2004

As result the GNP was increase during the period 1990/2005, this increase lead to increase in GNP per capita amounted 139726.9YR or 716.25$ in 2004 although the increase of population which grow to 20.0 million persons with rate of growth 3.08 in end of year 2005.

Chart (13) GNP per Capita During 1990-2004)

Source: Central Statistical Organization