

## **PHENOMENA AND BASIC MACROECONOMIC INDICATORS FOR MEASUREMENTS**

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**ABSTRACT:** *Macroeconomics is a separate discipline of the Economy that studies and analyzes the behaviour of economic aggregates and significant average, such as price level, national income, national income potential, the gap GDP, employment and unemployment of labour, investment and export of the whole economy. We can accuse to Macroeconomics that it deals also with the average price of all goods and services, not the prices of certain products. These aggregates result from economic behaviour of certain groups (governments, companies, consumers) in the course of their activities on different markets. But why does it need Macroeconomics? Experts say that we need this separate discipline because there are certain forces that affect the broader economy globally, which can not be understood only by analyzing individual economic phenomena, individual products or markets.*

**KEY WORDS:** *Macroeconomics; microeconomics; national income; gross domestic product; inflation; unemployment; trade cycle; trend; currency market; cash flow*

**JEL CLASSIFICATION:** *E00*

### **1. INTRODUCTION**

Macroeconomics totals together heterogeneous elements of economic value (goods, works, services and other goods) which is the aggregate national product studying its movement, it is also the average price of all goods and consumed services and determine the general level of prices for the economy, usually called the level price. By contrast, Microeconomics deals with detailed behaviour of individual agents, such as businesses and consumers in the activities of individual markets (oil market, grain market, etc.).

When a problem affecting all businesses and employees in various fields have analyzed it throughout the economy and if the circumstances are common in many sectors of the economy, economy-wide analysis helps us better understand what happens, studying the representative units considered part of the economic context.

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## 2. THE MAIN MACROECONOMIC PROBLEMS

Key macroeconomic issues are: economic cycles, general standards of living, inflation and recession, unemployment, government and budget deficits.

Business cycles - a series of ups and downs, not by a constant pattern of a moving economy. Technology business cycles can be identified with notions like:

- *Depression* - characterized by high unemployment and low demand, compared with the capacity of economy to produce. Thus, part of the productive capacity is unused, of business profits which are low or even negative for some firms, it lacks faith in positive economic prospects in a immediately future, what determines many companies not take a risk in November investments;
- *Recovery (expansion)* - is characterized by replacement of worn equipment, increasing labour occupation, increased production, sales and profits, noticeable growth of income and consumer spending, changing economic environment mentality from pessimism to optimism, and on the relative fund increase in demand, re-employment of unused production capacity in depression and unemployed labour absorption by default, launch new investments;
- *The peak* - represents the maximum of the cycle, characterized by high use of existing production capacities, labour shortages, and shortages of raw materials, which cause an increase in demand. Costs also grow and since prices also grow, yet, the business remains profitable.
- *Recession (contraction)* - represents an economic loss, more precisely, it can be defined as a decline in real gross domestic product from two successive quarters. Demand decreases and, as a consequence of production and employment decrease labour, as it happens with personal income. Profits decline, which seemed profitable investments in terms of increasing demand, now, they become unprofitable, profits decline and companies face financial difficulties. If recession is spread in time, it is possible that used production capacity not to take place because the unused capacity permanently increases. After dates in history, when a recession is strong and sustainable is called CRISIS;
- *Boom and crisis* - are two non-technical concepts, but often used. The crisis we have already defined previously and it is the opposite of depression boom increasing economic cycle that is half.

Economic cycle refers to the short-term fluctuations. Although phases of business fluctuations are described in these terms, there are no two identical cycles. Thus, starting from a lower turning point, the cycle goes through a phase of expansion (recovery), it reaches a turning point situated above and, then it enters to a recession. Cycles differ one from each other by amplitude peaks, their depressions and the speed with which a phase follows another one, although sometimes, the half ascending represents the "boom" (explosion), and the whole half descending represents "depression". A general living standard – is specific to any company and depends on how much it produces. The goods available for consumption depends on the goods

produced and the latter depends on the number of people working in production and productivity of their work. Living standards are directly proportional to the productive capacity and, therefore, it can be said that no company can get a real consumption increased only by the vote of higher real incomes for its citizens.

Inflation and recession are common words for governments, with competitiveness and economic growth, they are concerned about how to prevent recessions, reduce inflation, increase competitiveness and stimulate economic growth. Those who are in employment wish to avoid unemployment, which occurs along with the recession and continues to get revenues. Pensioners are concerned to protect against inflation hazard that can decrease the value of their savings. Companies are concerned about how inflation and recession, amid competition, may affect their profits and may even survive. Each of these concerns play a major role in Macroeconomics, and there are some of those forces that I mentioned at the beginning, which affect the economy as a whole and which requires the discipline of Macroeconomics.

Unemployment is an imbalance, an excess of supply over demand for workers with different levels and directions of evolution in the countries and periods that occur, it increases with worsening economic activity. Analysis of the causes and potential solutions are also on the current unemployment Macroeconomics' agenda. In all cases of recession or crisis, economists have proposed solutions for reducing unemployment as governments increase spending or reduce taxes. Why the governments are so reluctant in implementing such solutions today? Why some countries have a much lower unemployment rate than others? What is the relationship between such fiscal stimulus and inflation?

Government budget deficits are characteristic of governments that give free rein to their expenses without a match revenue collection capacity. Over the years, on the whole world, these deficits have been and are financed by government loans, which increased the national debt. At certain times, it was believed that budget deficits could be beneficial for the economy, because government spending creates jobs, but today there is concern about the potential burden of debt on which interest must be supported by leading contributors to maintain high tax rate. Is this a conflict between government policies and budget role governmental? Is a positive sign for the government budget deficit? It's a healthy economy if governments pursue a balanced budget? Recessions can be mitigated if governments deliberately pursue budget deficits? There are questions that Macroeconomics has the duty to respond and provide solutions.

### **3. FUNDAMENTAL MACROECONOMIC PHENOMENA**

Without macroeconomic analysis of the fundamental problems in close accordance with the fundamental macroeconomic phenomena, it can not be given answers. Current macroeconomic condition of a nation, it can be a complete picture, described by the level and growth rate of total production and per capita employment of labour, unemployment rate, inflation, interest rate, foreign currency value and the balance of payments' answers. About these phenomena and indicators to measure, we

hear daily on the news and read on the newspapers. Politicians and economists theorize during campaign speeches on their side.

The question that arises is why policy decision has to be above economic decision (professional). Who established the hierarchy between politics and economics? By shaking hands and uniting minds (by ideas and will), are the professionals able to overturn the situation?

We will present you some of the fundamental macroeconomic phenomena, causes and the environment in which these variables affect the economic well being, and we extend our presentation on how these variables are measured.

### **3.1. Income and production**

The phenomenon at the most comprehensive level of overall national economic activity is the production value. To measure the total production, quantities from a variety of goods are aggregated. We can not add an amount of coal to wheat, but we can gather monetary value of coal production with monetary value of wheat production. By adding the value of all goods made in an economy, we calculate the total national output, measured in local currency of that economy. This cash value of domestic production is just the nominal national income.

The variation of this size variation can be determinate both by the physical quantities and also the prices which it has to the base. Economists follow, exactly, to determine the extent to which any change is due to quantity or price changes. To achieve this, they do distinguish between changes in real national income, which occurs when the quantity of goods and services change, and changes in price levels. To determine the real national income, economists must determine what would happen if the national income would remain to constant prices. To do this, they evaluate all the quantities produced in a year at a constant set of prices that prevail in an arbitrarily chosen base year.

Thus, the real national income measures the total value of individual productions where each production is valued at current prices, but at a set of prices from a reference year. So, the nominal national income evaluation is based on current prices and national income is also called cash, and real national income is based on the evaluation of prices per a year and it is called national income at constant prices.

Considering that all we are interested in are the real production of goods and services, we use the terms "national income" and "national production" to refer to real national income and real national output. An essential concept correlated with national income is the national potential income that expresses what could produce a state economy using up all the resources and production capacity. It is usually referred to this concept as the "potential income" or sometimes "full employment income".

The difference between potential income and real income (which the economy actually produces in reality) is the output gap and GDP gap. True, there may be situations of equality of income and potential income as they are current and desired. But when the economy operates below potential output, output gap is called empty recessionist.

There may be situations where current income can not exceed the potential output gap and it becomes negative, situations in which we are dealing with a bowl. This explains the fact that income potential is defined for a normal rate of use of production factors and the normal rate may be exceeded temporarily. These variations consist of performed overtime labour, resorting to an extra hand, unclosing production capacity for routine repairs and maintenance etc.

We can appoint temporary circumstances because such opportunities are on short term, but with inflationary effects. Output gap created in this system is called inflationary gap. One of the most used sizes of national income is called gross domestic product or GDP, which can be estimated as real GDP or nominal GDP or GDP, and GDP expressed by expenses and GDP expressed by income.

Another related concept of income is gross national product (GNP). If GDP measures the produced output, i.e. income created in a country, GNP measures the income earned by a country. To convert GDP to GNP is necessary to sum all revenue collected from local businesses in assets held abroad and lower incomes, payments of foreign economic entities which hold assets in the country. This difference is called net property income from abroad and actually represents the transition from GDP to GNP.

### **3.2. Employment, unemployment and labour**

National income and employment (and therefore unemployment) are closely related, such as short-term national income when the economy is fixed, the only way to produce more is to hire more workers. Labour productivity growth is a major source of economic growth, but the effects are felt on long term. Employees' represents the number of adults who hold a job and "unemployed" number of adults who do not work but actively seeking a job. Unemployment rate expresses a percentage of the workforce and it is calculated as the ratio between unemployment and labour.

Talking about unemployment and labour, it can suggest other concepts such as:

- full employment of labour - is often confused with the absence of unemployment and that is why in certain parts of the globe (North America), it is now called high occupancy labour;
- employment in terms of balance of jobs - the employment of labour when GDP is generated to its potential.

Full employment of labour is always accompanied by some unemployed for two reasons: any time when the number of vacancies exists at the same time and persons who seek employment (unemployment due to the normal flow of workers) and this form is called frictional unemployment or when because the economy is in a constantly changing and adaptation, there is always a discrepancy between the structure of labour demand and the structure of labour supply and this form of unemployment is called structural unemployment.

Employment in conditions of equilibrium of the labour force only occurs when there is frictional and structural unemployment. When there is not full employment of jobs, it appears and other forms of unemployment, the main cause being the economic cycle. Thus, during recessions, unemployment becomes excessive, over the structural

and functional unemployment and it is called cyclical unemployment (unemployment due to insufficient demand).

Unemployment when the economy operates with a potential GDP, it is called the natural rate of unemployment (unemployment rate which accelerates inflation). Estimates of the rates are quite difficult, but nevertheless, they are useful and they are made, representing useful delimitations, by which economists can analyze real performance of the economy measured by the real rate of unemployment.

Are accurate figures on unemployment? Unemployment rates calculated by agencies of state were always an insufficient number which reveals many aspects, even the concept of unemployment. The measurements, unemployment may be underestimated or overestimated. Thus, on the one hand unemployment overestimates actual measured unemployment by including labour which came from among the volunteer assets. Unemployment helps ensure protection against the real needs but also make people have a job pretending to seek work where recorded to the local office of the workforce.

This category of unemployed is included in the falsification of measurement data. On the other hand, the measured unemployment subsumes the real unemployment by not including a particular part of the workforce who would accept a job if it were available, but they are not enrolled for a job search because either they did not required for an unemployment, either they exceeded the legal period of unemployment and did not have documentation reactivated.

Talking to reality of unemployment which estimates unemployment, we can talk also about partially unemployment, to which fits the category which occupies part-time jobs, a category that is not reflected in official figures on unemployment. Unemployment is an indicator of social and political significance; governments being blamed when it is raised and invested with confidence when it is low. Except for inflation, unemployment is one of the indicators which all governments provide a great significance in macroeconomic policies. Normal economic changes and new economic policies can make progress in removing persistent unemployment but should not be accepted as inevitable.

### **3.3. Inflation and price level**

Inflation is the growth in prices; a process that creates a state of economic imbalance in the existing money supply, in the economy exceeds, the actual needs of the currency, causing reduced purchasing power of the money. In studying the behaviour of inflation, economists use two concepts.

The first is the price, which refers to the average of all prices in the economy, and the second is inflation, which is defined as the percentage variation of price levels from one year to another. The need for measuring the level of prices has led experts to build a price index, which is the average price of various categories of goods, depending on their importance.

In another train of thoughts, price index can also be defined as an indicator that measures how much cost more goods in a year compared to how much cost in a year of (arbitrary) reference.

Inflation is one of the macroeconomic phenomena to priority attention to policymakers, because most citizens, economic agents complain effects when inflation is high and they are filled with worry that soon it will rise when inflation is low. Economic values are measured in money; we use them to run our businesses, wages, and loans, personal or corporate accounts which are also expressed in money. We cherish them not for themselves, but for what we can buy with them, meaning for the purchasing power and their real value. Purchasing power of money can be defined as the amount of goods and services that can be purchased with an amount of money. Purchasing power of money is inversely proportional to the price level. Studying the behaviour of inflation over time, we meet various manifestations of the inflation, such as:

- *Total anticipated inflation* - is the inflation that has no real effect because, firstly, all the employees know what financial arrangements will be, the inflation rate for the duration arrangement, and secondly, not all financial obligations must be expressed in real terms. In this case, the actual behaviour of the economy should be the same, with or without inflation.
- *All unanticipated inflation* - is inflation of the real value of all contracts expressed in denominated currency, it will change. This will encourage those who have a fixed payment in nominal terms and will penalize those who need to collect a certain sum of money. Inflation is that nobody feels it coming, nobody thinks about how to mitigate the effects until cancellation. Lenders will reimburse a less certain amount of money and so on, the borrowers will charge smaller amounts than those given loans. They will adapt to the situation, only when new contracts will be closed, but still remaining 'trapped' in the old ones.
- *Intermediate cases* - inflation falling somewhere between these two extremes (a total surprise or a total anticipation).

Inflation is a phenomenon difficult to predict with precision, adding to the uncertainties of economic life, highly variable rates of inflation causing a large uncertainty.

Price inflation rate measures variation of the level of prices into a period of time. Even if inflation is provided, all adjustments for inflation can not occur with the same speed, inflation redistributes income in a hazard way (those whose incomes are adjusted more slowly than prices will lose and those whose nominal income will increase before inflation win).

In another vein, even though inflation is provided, there are all the state institutions that would be necessary for all of them to avoid the consequences. Also, much of taxes are set in nominal terms, making the effects of inflation to vary with the price. Thus, the tax system in many countries, allows firms to deduct damping profits. If there is a rapid inflation, the allowed depreciation to be deducted, it may be much smaller than the real depreciation, making capital more expensive for companies and tends to reduce the effect of investments, and later the economical growth.

Some of the effects of inflation can be reduced or even completely avoided by indexing, which can be defined as linking payments to be made in terms of a contract with variations in price levels. In practice, indexing is less used than it should. Most of

the tax system is not fully indexed, and contracts are usually concluded in nominal terms, thus supporting the anticipated inflation risk. There are also long-term pay programs and savings that are related to indexing. Indexing application, more or less, is the prerogative of each government legislation and policy.

### **3.4. Interest rate**

Can be defined as the price paid for money borrowed for a period of time and it is expressed as a percentage of money per unit. We face here with the concept of basic interest rate, a rate which banks use as a reference for all the interest that customers require. It is usually when they officially change as a result of government policy changes. Correlated with inflation, interest rates behave differentially, depending on inflation and we are dealing with nominal interest rate or real interest rate.

To obtain a real rate, it should be set the nominal rate at the desired real rate plus expected annual rate of inflation. Obligations of the borrowers depend on the real rate and not the nominal one. The interest rate is an important indicator in the banking market, with many economic connotations, such as for example, the influence on determining the total investment costs (when interest rate is high, investment loans are expensive and less effective than when interest rates are lower. The higher investment costs rise, potential GDP will be even more damaging on long-term future and living standards), it can influence the economic cycle with variations in interest rate and default rate of development.

### **3.5. Exchange rate and balance of payments**

The analysis of macroeconomic phenomena and their effects, it is normal to take into account two very important indicators of each state's position in the international economy, namely exchange rate and balance of payments.

Exchange rate measures the amount of international currency and it is the price at which two currencies can be converted into one another. Interdependent notion of exchange is the exchange rate, the real effective exchange rate, foreign currency exchange market.

Real exchange rate is exactly the price that changes a currency with another, as long as the effective exchange rate is an indicator of the value of a currency against a basket of currencies consisting of all other European currencies.

Term assessment can be used to describe an increase in foreign currency (domestic currency that now worth more), while the depreciation period can be used to describe the reverse. Currency refers to foreign currency or in foreign currency effects such as bank deposits, checks or guarantees and payable in foreign currency exchange market; it is the market where foreign currencies are traded at prices denominated in exchange rates.

To know what happens with international trade and international movements of capital, governments keep records of transactions between countries, called the apparent balance of payments. Balance of payments records, all international payments



made for purchase of goods and services of both, and financial assets such as shares and bonds. We can discuss the trade balance, a term used to make specific reference to the difference between visible exports and visible imports and the balance on current account, which refers to visible trade, services and income flows from interest and dividends. Balance of payments deficits size is often a cause of political concerns, though; the balance of payments is a problem for politicians in terms of a fixed exchange rate than when the exchange rate fluctuates freely.

#### **4. CONCLUSION**

The questions to which macroeconomics tries to answer, come as an echo to the problems to which the individual economy really faces by individual state economy (national) but also, in interdependence with the international economy. For correct evaluation of the behaviour of various economic phenomena, experts have considered that before any other analysis must be carried, it must be made the difference between trend and cycle, the first being related to study economy for long periods of time (term), the second it can be found as a measure of time, within the first. The analysis of trends is appropriate to ignore deviations from trend, but this simplification does not significantly change the results because the long term, real GDP is similar to potential GDP change. Furthermore, over long periods of time, they are more interested in the evolution of production capacity in the economy (potential output).

While trends affecting long-term economic welfare at any given moment in time, the essential element is the economy which actually works as compared to its real potential. To examine the economy, we must study economic cycles, meaning short-term fluctuations outside growth trend. These fluctuations are important when the economy operates below potential and unemployment is high involving human suffering and economic waste. When the economy operates above its potential, inflationary pressures is strong, accompanied by economic disruption. Changing labour productivity and labour force structure dominates the long-term production trends and the occupancy rate of labour productivity and labour, but generally change slowly.

To analyze short-term phenomena movements, it is appropriate to ignore the long-term trends. It can be done considering holding both national income and labour productivity as constant. In these conditions, increased production means an increase in employment and unemployment reduction, production is directly proportional employment of labour and inversely related to unemployment. Considering productivity and labour as constant, not only simplify the analysis, but also more reasonably, it is an approximate reality when we deal with short-term behaviour of the economy.

Dominant historical trends of the economy are real production growth and the long-term price level. Increased production was never completely continuous. There have been, always, fluctuations around the trend rate of output growth. Growth study is simplified by ignoring these fluctuations and focus on pronounced trends. Study of fluctuations is simplified assuming trends are zero, so that all variations are fluctuations.

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