Analysing the gross domestic product

This essay aims to explain the definition of Gross Domestic Product, the calculation of GDP, differences between real GDP and nominal GDP and limitations of GDP. The main issue in this subject, real GDP indicates the standards of living correctly, if it is not the inadequate sides of real GDP when measuring the welfare of society.

Recent years, the GDP has been argued with its' deficient sides to measure the living standards. And also new measure of well-being indicators was developed. In this study, you will discover the alternatives measurement systems to real GDP.

Gross domestic product is the measure of the value of goods and services that produced in an economy in a given time period. It illustrates the economic situation of a country. The gross domestic product in developed countries is higher than the developing counties and also undeveloped counties.

There are three approaches that used to calculate gross domestic product:

Expenditure approach

Product approach

Income approach

The result of these calculating methods is conceptually same. GDP measures only final goods and services that consumed by users. The intermediate goods and services can not add the calculation to avoid the double counting in same economic area. The most common way to calculate gross domestic product is expenditure approach by summing four possible types of expenditures:

GDP = private consumptions + investment + government spending + net export (exports – imports).

GDP = C + G + I + NX

Private consumptions (C): It means the costumer expenditures in a country in a year. The value of final goods and services are consumed by the costumer in a year.

Investment (I): It is action in an economy that purchasing something today to make benefits in the future for earning income or profit.

Government spending (I): Economists divide government expenditures three main types. Government consumption (purchasing goods and services), government investment (investing money for future benefits such as infrastructure investment or research spending), transfer payment (not purchasing something just represent transfers of money such as social security payments).

Net export (NX): The balance of trade, the financial value of final goods and services that the country sells to other countries minus the final goods and services that the country purchase from other countries in a certain time period.

The other way to calculate GDP is product or value added approach. It can be found by the value of sales of goods minus the purchase of intermediate goods to create the goods which are sold.

The last approach to find GDP is called income approach, the way is adding up factor incomes to the factors of production in the society.

GDP = Compensation of employees + corporate profits + proprietor’s income + rental income + net interest.

NOMÄ°NAL GDP REAL GDP

Many different varieties of goods and services such as computers, cars, books, glass, tanks, and umbrella come together and constitute the GDP. There should be a relationship between the materials which can be used to calculate the GDP.

According to an economist there is a natural way to combine all these products into single number; convert every good and service into money and find their market price. Thus market value of each good or service can be used in calculation of GDP.

This information raises the question of which prices to use in valuing different outputs. This information raises the question of which prices to use in valuing different outputs. The economy literature gives two option the first one, using their today’s’ selling price to calculate GDP. The name of this approach which consideration into today’s’ price is nominal GDP. This approach seems enough for calculating GDP but there is a serious disadvantage. Nominal GDP increase when the prices increase, even if there is no rise in real production. For instance this year the price of pen is 2. 00 pound, last year 1. 50 pound because of the price difference the result of GDP change. Whereas there no distinctness between both year’s production of pens. (Campbell R, McConnell, Stanley L. Brue – 2005).

The reason of the nominal GDP is affected by the price changes and as we know GDP provide the information of nation’s well being economists want to delete the effect of changing price. The economists use a price index which called the GDP deflator to calculate how much prices have changed from year to year. For example in 2000 and 2001 the amount of boat that produced in same country is 100. In 2000, the price of boat 50 pound and in 2001 it is 60 pound. The nominal GDP changed while quantity of production same. The real GDP remained same because the price which is using the calculation same in both years. The nominal GDP is divided by the price index when the real GDP is calculating. (Walter J. Wessels – 2006).

LÄ°MÄ°TATÄ°ONS OF GDP STATÄ°STÄ°CS

Gross Domestic Product is a significant pointer about countries economic situation. However, economists around the world have consensus of GDP is not enough indicator to understand the countries' economic life. Commentators take consideration into the limitations of GDP while using as well-being measure. The reason of inadequate to measure of wellbeing is GDP was not designed to evaluate this; GDP indicates the value of goods and services the country produce in a year.

In last two decades of twentieth century, produce ecologically sustainable has been becoming very important to provide overall human standard of living. Whereas GDP prefer to loss environment instead of invest money to rescue ecosystem because of the high cost. Environment is paid attention more and this issue increases the critics on GDP there are three main components that makes GDP inadequate:

1-Accounting of the quantity of national resources

2-Accounting of environmental damages affecting welfare and amenity services

3-Includes protection payment to avert environmental degradation (Michael S. Common, Sigrid Stagl – 2005).

The other shortage of GDP:

Wealth Distribution: GDP does not include the difference between rich and poor peoples’ income. Numerous Novel-prize winning economists have discussed about importance of income disparities. Disparity of income in the short-term plays a positive role for long-term economic growth. In fact if there is increase in income inequality in a short term, it may result a decreasing trend in income disparity in long-term.

The Black Economy and Non-monetary economy: GDP can not introduce the black economy in its result of living standard so GDP may not indicate true welfare of society. Unrecorded economic activities constitute the black economy. It has been growing very quickly if it finds the weak economy which allows it to spread. The Economist’s latest research represent that the total value of the black economy all over the world is $9 trillion. The rate of underground economy is declared to 15% of national output in developed countries and 33% of national output in undeveloped countries. According to survey the biggest underground economy is placed in Nigeria and Thailand the rate of underground economy in both countries is more than 70%.

And also some outputs in economy are not sold at market; these are self-consumed products or barter trades' products. These economic activities are called non-monetary economy. (Walter J. Wessels – 2006).

Quality of goods: Some people might choose to buy low-quality goods instead of buying high-quality ones in same product. It is possible that the price of high quality is more expensive than lower ones. In addition, GDP does not include the improvements of quality and new products. For instance, despite of the development in computer technology and decreasing the computer price, GDP act them as the same products by calculating them only their monetary value. Therefore GDP calculate both products with same value the result of GDP forms incorrect. (Walter J. Wessels – 2006).

Tastes and preferences: Changing in tastes and preferences are also affecting the social welfare. Ages, religions, migrations, cultures and ethnicity are playing decisive role at humans' tastes and preferences of goods and services. For example, a group in their twenties and another group in their fifties of course select different types of goods and services. The disparity between two groups is occurred significantly important changes. Thus without including these factors comparing the social well-being indicate the flawed result. (Matthew Clarke, Sardar M. N. Islam – 2004).

" Bads" as well as " Goods" Get Counted in GDP: At the end of the Wars, disasters, epidemic diseases governments spent more money to subsidize the infrastructure citizens' monetary loss. The expenditures add the calculations of GDP and increase the GDP per capita. This is a tragic fact of how the GDP exaggerate the social well-off the country. For instance, September 11, 2001 disaster struck the United State there were no doubts this made nation worse off. Because of the subsidized expenditures such as cleaning and reconstruction, GDP seems better than the previous year. But the social welfare was absolutely worth. (Campbell R, McConnell, Stanley L. Brue -2005).

The Balance between Consumption and Investment: Analysing the balance between consumptions and investments is important for the economies' long-term position. Sometimes an economy uses many resources to provide consumers' need and expectations in a short time period as a result, the economy deplete its' resources soonest. In this short term period, a deceptive improvement can be seen in living standards but it might affect future growth prospects.

THE COMPARISON OF COUNTRIES

The table below illustrates the Gross Domestic Product (GDP), Population, and Gross National Income (GNI), Gross National Income per Capita (GNIPC), Atlas Method and Purchasing Power Parity (PPP) of five different countries in 2008.

Economy

GDP(millions of dollars)

GNI (millions of dollars)

Population

(thousands)

Atlas Methodology (US dollars)

PPP

(international dollars)

Singapore

181, 948

168, 227

4, 839

34, 760

47, 940

Ukraine

180, 335

148, 643

46, 258

3, 210

7, 210

Algeria

173, 882

146, 365

34, 362

4, 260

7, 890

Chile

169, 458

157, 460

16, 758

9, 400

13, 270

Pakistan

168, 276

162, 930

166, 037

980

2, 700

It can be seen that the GDP does not give a sufficient idea of living standards in the countries. For instance, the GDP of Singapore and Ukraine are very close but GNIPC of these countries have big disparity. In addition, it is same with Chile and Pakistan although their GDP, the GNIPC (PPP) of Chile is about six times bigger than Pakistan. Of course, the population is playing very significant role to find GNIPC while the GDP is shared by the citizens of country. As I mentioned before in limitations of GDP, GDP might be good indicator to illustrate economic growth or GNIPC is good indicator of citizens' income in the country but they are inadequate indicators of living standards or well-being of the countries. If the realistic result of welfare is searching, the other factors should be taken into account. The political and environmental situations, wealth distributions and tastes, quality of goods and cultural structure of countries effect well-being in society. And also black market and non-monetary activities provide some input and output in economies but these data are not considered by GDP.

ALTERNATÄ°VES TO GDP

GDP per capita: After finding the total value of final goods and services produced in a particular country in a year, dividing it to population gives as a result of GDP per capita. That is to say the ratio of GDP to population is called GDP per capita. Economists consider the GDP per capita to evaluate the average standard of living and social welfare.

Gross National Product (GNP): While completing the national accounts, there are two small problems that could occurred. First one is; foreign investors or people own some of our capital, secondly our citizens might have some assets abroad. There are no connection between domestic income and these assets or properties earn income. Gross national product is the total income of citizens earn elsewhere. Actually GNP is defined the " the value of all goods and services produced in a country in one year, plus income earned by its citizens abroad, minus income earned by foreigners in the country". (D. Begg, S. Fisher, R. Dornbusch – 2003).

Human Development Index (HDI): Definitely, GDP and GDP per capita is necessary to indicate the countries' economic power and humans' income but inadequate to measure economic development and social well-being. In 1990, Human Development Index (HDI) was used first time by United Nations Development Programme (UNDP) to compare countries' living standards with each others. HDI includes all oppressive factors, which national accounting concepts does not contain, such as environmental pollutions, quality of life, social justice etc., and non-market goods and services while calculating seeking the living standards of countries. Three main indispensable points require for HDI, these are: life expectancy, gross enrolment ratio, gross domestic product per capita. (Subrata Gratak – 2003).

Genuine Progress Indicator (GPI): This method is recognized instead of GDP enhanced by Redefining Progress, of Berkeley, California. Many important factors, GDP does not include, are comprised by GPI. Some of them are: non monetary activities, pollution, unemployment, income distributions, leisure and working hours, environment damage, reduction of resources, the effect of negative and positive defensive and infrastructure expenditures. Until about 1980, the result of GPI index increased more or less tandem with GDP index varies from country to country. Then it dramatically reduced because GPI contains the visible negative factors which affect directly the economic growth and social life and this made it more useful. (Cavanagh, John Mander, Jerry – 2004).

Gini Coefficient: this is a measurement method that calculates the distribution of income in a country. In 1912 Italian statistician improved the Gini coefficient and declared in “ Variability and Mutability”. The common reason to use Gini coefficient is to calculate the inequality of income or wealth. Gini coefficient is value between 1 and 0 which indicates the distribution of income or earnings. When all the incomes equal or there are no different between the actual distribution then the value of Gini coefficient would be 0. In contrast, if only one household received all the income the Gini coefficient would be 1.

CONCLUSION

Gross Domestic Product, the total market value of all final goods and services produced in a country in a given year, equal to total consumer, investment and government spending, plus the value of exports, minus the value of imports. By using price index as a nominal GDP to find more certain measurement that is called real GDP.

The real GDP might be enough to indicate the countries’ economic growth. However, real GDP is incompetent indicator of living standards. Many different factors affect people’s lifestyle and preferences. Of course GDP per capita give an idea of humans’ income and it is clear that income have very significant influence to make decision about tastes and preferences but it is not only one factor that effect humans’ decisions.

As far as I am concerned that GDP does not include black market and non-monetary activities. In addition, such as environment, politic situation and structure of culture play important role to classify the standards of living. So these factors should be taken into account when measuring the standards of living.

The argument in against of using GDP is sufficient indicator of standard of living, but rather that (all other things being equal) standard of living tends to increase when GDP per capita increases. This makes GDP a proxy for standard of living, rather than a direct measure of it.