ECONOMIC AND SOCIAL ENVIRONMENT - GLOBAL OUTLOOK 2016 AND BEYOND

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Abstract
The aim of the paper is to provide a perspective on the current economic situation through a brief analysis of the economic environment and main macroeconomic indicators. Today's economy shows a moderate improvement, with a more gradual growth in emerging markets and developing countries and a modest growth in advanced economies. Prospects are showing that the total economy output will still remain under the pre-crisis levels and countries must take into account many challenges like high unemployment rates, geopolitical issues and need for a high quality life.

Key words: GDP, unemployment, inflation, economic growth

JEL classification: M 40, M 48, N 10

1. Introduction

Today's economy shows a moderate improvement for the United States and for the European Union but many other countries like China, Russia and Brazil are still struggling to recover.

Overall, global economic activity remained subdued in 2015 and lower prices of energy, oil and commodities were recorded. As a result of a higher oil supply, oil prices fall impacting fuel exporters and gas extraction industry.

Advanced economies had a moderate and uneven growth but for 2016 the economy is projected to rise. Growth in emerging markets will be moderate, Euro Area's GDP is expected to increase during following years, with a stronger private consumption supported by lower commodity prices and improved financial conditions. China is expecting a slow recovery after 2015

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because of a slowdown in imports and exports. United States show signs of solid growth and Russia is under low oil price pressure and has to cope with geopolitical issues.

2. Current economic situation

2.1. United States of America

The United States of America is the world's largest economy. The main macroeconomic indicators in the last years show signs of recovery and healthy economy, GDP is growing and unemployment is lower, as shown in Table 1 below.

The prospects for the following period show a solid growth, supported by consumption and notable investments. Government expenditure is expected to rise and the Federal Reserve too, as a result of a strong dollar. The GDP growth rate will remain within the projected values, the economy does not show signs of inflation or recession. Oil production in the last period impacted economy all over the world as the price of oil decreased, favouring low commodity prices and rising profit margins. Manufacturing in US is expected to grow at a robust peace and unemployment is expected to decrease.

Table 1: United States of America indicators 2007-2014

Indicator	2007	2008	2009	2010	2011	2012	2013	2014
GDP, PPP (bil.int $)	14,478	14,719	14,419	14,964	15,518	16,163	16,768	17,419
Unemployment (%)	4.70	5.90	9.40	9.70	9.00	8.20	7.40	6.20
Inflation, CPI (%)	2.85	3.84	(0.36)	1.64	3.16	2.07	1.46	1.62

Source: Source: www.worldbank.org

2.2. European Union

The European Union is the second large economy in the world and, according to the European Commission economic forecast, is recovering and growing at a steady peace. Labour market conditions show signs of improvement and the Eurozone deficit is expected to diminish while lower oil price slows inflation. In emerging markets growth is expected to be slow and in advanced economies modest and uneven. The interest rates will remain low and the global trade will be weak.

The migrant crisis puts pressure on EU's economy. While Europe is still trying to recover and to cope with the European sovereign debt issue, the migrant crisis has a significant impact causing both opportunities and challenges.

The European sovereign debt crisis has been taking place since 2009 and refers to the collapse of several countries in Europe. Il all started when Cyprus, Greece, Ireland, Spain and Portugal were unable to repay governmental debt without being helped by financial institutions. All this happened mainly due to easy credit conditions and international trade imbalances.

The European crisis significantly affected economy with high unemployment rates and slow economic growth, but, according to estimations, Euro Area's GDP is expected to increase during following years, correlated with unemployment gradual decrease

Europe has today an aging population due to low birth rates and higher life expectancy. A wave of young workforce could be beneficial. After the integration of migrants in the labour market, the productivity will get a boost. Unfortunately, the process is going to be slow and expensive because of the impediments posed by cultural differences and skills. GDP /capita will fall as expenses with migrants integration will rise: social protection, shelter, food, language and professional training.

Aggregate demand will increase as a result of migration, annual growth rate may decrease because the demand will not be supported by production.

Because the wage levels are low in countries where refugees had left, an increase in unemployment rate and dissension in the labour market are likely to occur.

Table 2: Europe Union indicators 2007-2014

Indicator	2007	2008	2009	2010	2011	2012	2013	2014
GDP, PPP (bil.int $)	15,917	16,636	16,295	16,761	17,471	17,667	17,932	18,465
Unemployment (%)	7.18	6.97	8.96	9.64	9.61	10.51	10.90	10.21
Inflation, CPI (%)	2.63	4.20	0.95	1.67	3.31	2.72	1.39	0.22

Source: Source: www.worldbank.org

Table 3: Eurozone indicators 2007-2014

Indicator	2007	2008	2009	2010	2011	2012	2013	2014
GDP, PPP (bil.int $)	11,461	11,981	11,701	12,064	12,561	12,620	12,737	13,109
Unemployment (%)	7.43	7.50	9.55	10.18	10.18	11.40	12.04	11.53
Inflation, CPI (%)	2.51	4.08	0.37	1.53	3.29	2.49	1.37	0.24

Source: Source: www.worldbank.org

2.3. China

China managed to exit the 2008 financial crisis head up due to the last decades continuous growth and high foreign exchange reserve that allows the Central Bank of China to purchase domestic currency through monetary policy, in case is needed.

Because of intense investment projects, China became a major manufacturing economy, and succeeded to enter new markets, with 55% of total exports based on electronic equipment.

Since 1978 China shifted form a centrally planned to a market based economy and is now considered to be the second largest economy, but with the fundamental challenge of poverty reduction, alongside pollution issue and a higher life quality needed.

The GDP increased gradual since 2008, inflation rate decreased and unemployment remained constantly the same. According to prospects, in 2015 China recorded a slower growth rate due to structural changes in economy, overcapacity in some sectors and high debt. The prospects for the following years show a gradual decline with not sustainable long term stimulus. The national currency is expected to weaken so a loss in investments is expected to happen.

2.4. Russia

If we analyze the economic indicators in Russia we can see that the unemployment rate was about 6% before 2008 crisis and, though it decreased from 8.3% in 2009 to 5.1% in 2014, the projected rate for 2015 is about 5.96% and the forecast is even worse as by the end of 2016 the unemployment rate is expected to raise above 6-6.5%.

The GDP has been growing at a steady peace but it is expected to record a decrease in 2015. In terms of inflation, the values seem to be the worst since 2008 crisis: while the inflation rate was 7.83% in 2014, according to the Federal Statistic Service, 2015 inflation rate is projected at about 12%.

Russia's economy has been facing many challenges during the last 2 years, mainly due to a tensed political context and low oil prices.

After the annexation of Crimeea in the first quarter of 2014, The Russian Federation was condemned by many countries because of the infringement of international law and even was suspended from the Group of leading industrial countries, G8.

Several rounds of sanctions that came from the United States, the European Union or countries like Canada, Japan and Norway, aimed to limit Russia's business transactions.

The sanctions banned investments in Crimeea, security issuance or the rights to travel to specific countries for several Russian individuals. US and EU also banned business transactions of several Russian officials and applied an embargo on arms and military use technology. Japan, for example, freezed funds for projects in Russia. The sanctions approved refered also to restricted imports from Crimeea.

Russia responded with several reciprocal sanctions like embargo on imports and exports and ban of airspace use. All sanctions affected the countries involved.

Because of intensified challenges, weak economy and geopolitical tensions, Russia entered recession. Decline in oil prices, increased interest rates and higher food prices lead to Russian ruble collapse and though the Central Bank of Russia tried to slow down the currency decline, the confidence in Russian economy diminished.

The situation went even worse for Russia when Ukraine started a boycott on goods and services provided by Russian companies.

Russia's economy now faces decline as oil prices fall and imports and exports show a downward trend, the poverty rate increased form 13.1% in 2014 to 15.1% in the first half of 2015.

2.5. Brazil

One of the fastest-growing major economies in the word, Brazil, is considered to be at the same level with Russia, India and China, all four are known by the BRIC acronym.

If we take a look at Brazil's economic indicators for the last 20 years we can see a constant and sustained growth. The GDP indicator shows a gradual increase and unemployment decreased. However, since 2014 Brazil is in recession and prospects do not show signs of improvement on a short run.

The 2015 forecast reveals an inflation rate of over 10.9% and an unemployment rate above 9%. These values are in contradiction with Brazil's economic trend and may suggest a future rampant inflation.

Latin's America biggest economy went into crisis mostly because of a downward trend of personal consumption, devaluated currency, decreased investments and political crisis. China's slowing economy also affected Brazil from the exports point of view because in the last decade high demands from China and India materialized into a higher export for Brazil but as China's economy is cooling, Brazil's exports will decrease.

One of the biggest recent problems for Brazil is the massive corruption scandal that lead to a deep confidence crisis. The Petrobras scandal from 2014 revealed a large consumption scheme meant to cover money laundering operations. The scheme included, among other companies and individuals, a well-known state controlled oil company, Petrobras. Many officials were involved and have been arrested because of their involvement in illicit activities.

Currently, commodities prices fell, investments fell, unemployment increases, inflation is growing, government is cutting public spending; all prospects are grim for Brazil. Extreme differences in terms of life quality also hamper the actual situation. Brazil needs investment encouraging programs, social security increase and environmental changes.

2.6. India

Another component of BRIC, India, is the 7th largest economy in the world by nominal GDP and is expected to overcome China in the near future. India has a developing economy and though the reforms undertaken were uneven, the agricultural reform managed to transform India from a big importer to a powerful exporting country.

India has the advantage of a small average age so the high offer of labour force can ensure progress on long term as life expectancy doubled and health conditions improved. Recent economic situation characterized by the lower oil prices favoured India as the commodities prices decreased and household purchasing power increased.

Prospects show a sustained growth for the following period but also the necessity of investments especially in education, framework and infrastructure, as the population is growing and on the move in search of job. Modernisation of manufacturing sector and foreign investment attraction are the main objectives for India.

3. Analysis of macroeconomic indicators

In support of the asumptions stated above, regarding the future development of economies, the data collected from World Bank, OECD and EY sites were analyzed and macroeconomic indicator values from different periods and regions were compared. The main indicators were GDP, Unemployment rate and Inflation.

3.1. Gross Domestic Product (GDP) is a monetary measure used to determine the national economic output, the value added. It represents the monetary value of all the finished goods and services produced in a specific period of time and it became the most important economy measuring tool in 1944.

According to OECD, GDP is defined as "an aggregate measure of production equal to the sum of the gross values added of all resident, institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs)".

GDP can be determined in three ways:

a) Income approach – the GDP calculated using the income approach is sometimes called Gross Domestic Income (GDI) and gathers wages, rents, corporate profits, interests and statistical adjustments arising from income taxes, dividends, depreciation.

b) Expenditure approach – in this approach GDP is determined as the sum of private consumption, private investments, government purchases and net exports as the difference between export and import.
c) Production approach – using the production approach GDP is determined by estimating the total value of economic output and deducting costs of intermediate goods consumed.

Regardless of the way of calculating used, GDP mirrors a country's economic health and provides an accurate picture of economic growth.

3.2. Inflation represents the generalized increase in prices in an economy over a period of time.

The inflation rate (Ri) is the percentage rate of change of a price index over time and shows how fast a currency looses its value. Inflation is caused by both monetary and non-monetary factors. The main causes of inflation are money supply, national debt, exchange rate fluctuations. There are some specialists that consider inflation as a good thing for the economy, as long as it is kept within limits, because it encourages wage increase and consumption. In order to counteract the effects of inflation a financial planning process is intended to maintain a certain level of investment and consumption.

3.3. Unemployment rate (U) is defined as the percentage of workforce unemployed but looking for job. As main source of personal income, employment is carefully studied and any movement in the associate indicators is supposed to imprint a certain trend for the other macroeconomic indicators. A rising rate of unemployment is a sign of a weak economy so it may determine a decrease in investments and an earnings decline. A decrease of unemployment rate indicates a growing economy and encourages spending but in also may draw attention on inflation and may cause interest rate increase.

All these indicators are regular tools used to determine the actual state of economy and to provide a basis for future forecasts.

3.4. Relation between GDP and Unemployment rate (U) - The Okun's Law

Okun's Law shows the relation between Unemployment rate (U) and GDP:

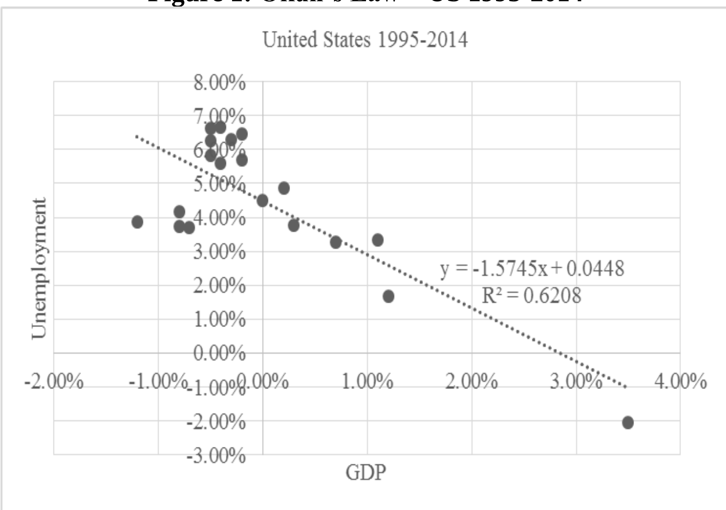
$(GDP_{Actual} - GDP_{Potential}) / GDP_{Potential} = -\alpha^*(U_{Actual} - U_{Potential})$

Where "α" is the Okun's law coefficient.

According to Okun, a 2% increase in GDP corresponds to 1% decline in unemployment rate.

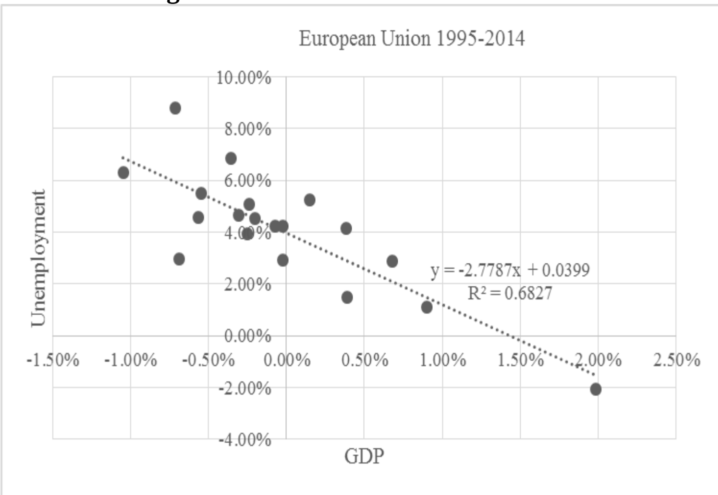
For a better understanding of the relation between GDP and U we can apply Okun's Law to analyze the growth rate versus the unemployment rate trend in different economic zones over a period of time, as shown in figures below:

Figure 1: Okun's Law – US 1995-2014



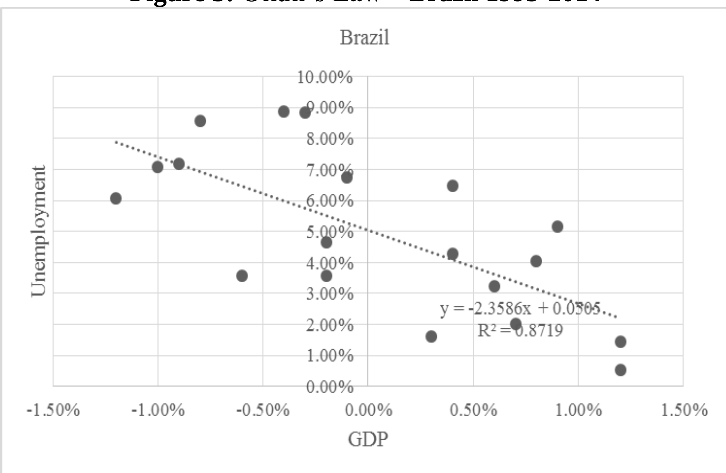
Source: http://www.economicsdiscussion.net/

Figure 2: Okun's Law – EU 1995-2014



Source: http://www.economicsdiscussion.net/

Figure 3: Okun's Law – Brazil 1995-2014



Source: http://www.economicsdiscussion.net/

Analyzing the figures above we cand determine the indirect relation between GDP and unemployment. Though the Okun's Law coefficient may vary, an increase in GDP will determine a decrease in unemployment rate. The relation is useful in economic forecasts.

3.5. Relation between Unemployment (U) and Inflation (I) - Phillips curve

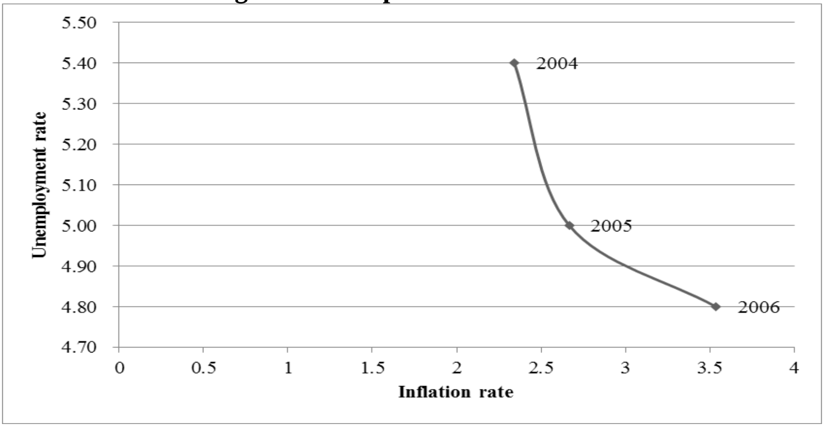
The relationship between unemployment rate and inflation rate is represented by the Phillips curve, an economic concept developed by A. W. H. Phillips who stated that unemployment and inflation have a consistent inverse relationship.

Since ever, unemployment has been considered a bad thing for the economy. Although a certain level of unemployment will always be present (natural rate of unemployment), on a long run high unemployment rates cause imbalances in economy. Spending power of the unemployed persons and families will decrease, governments will spend more on benefits for unemployed people, insecurity will rise and the standard of living will fall.

On the other side, a low unemployment rate may be a sign of expanding economy accompanied by inflation and, at the same time, by an increase in interest rate as a measure against overheating economy.

According to Phillips, on a short run, decreased unemployment will show inflation rate increase. As shown in Fig. 4 below, over the course of a given period of time wages increase slowly when the unemployment rate is high and more rapidly when the unemployment rate is low. In the case of Australia, as we can see, on a short run as long as the inflation rate is high, the unemployment rate is low. On a long run, the indicators vary (Table 4).

Figure 4: Phillips curve – short run



Source: http://www.economicsdiscussion.net/

The figure above shows the relation between unemployment and inflation in Australia for the period 2004-2006.

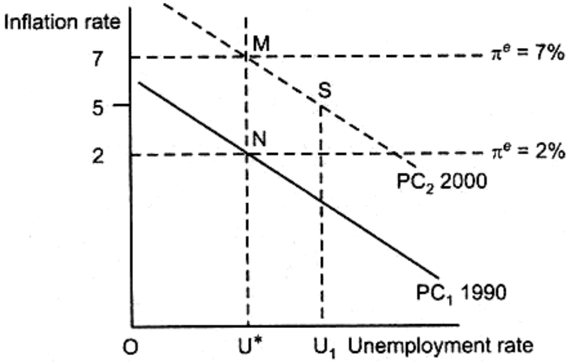
Table 4: European Union Inflation and unemployment 1995-2014

	Inflation Rate (%)	Unemployment Rate (%)		Inflation Rate (%)	Unemployment Rate (%)
1995	4.27	10.77	**2005**	2.48	8.94
1996	3.34	10.69	**2006**	2.60	8.22
1997	2.65	10.39	**2007**	2.63	7.18
1998	2.41	9.82	**2008**	4.20	6.97
1999	2.17	9.57	**2009**	0.95	8.96
2000	3.16	9.21	**2010**	1.67	9.64
2001	3.15	8.66	**2011**	3.31	9.61
2002	2.31	9.05	**2012**	2.72	10.51
2003	2.10	9.02	**2013**	1.39	10.90
2004	2.26	9.17	**2014**	0.22	10.21

Source: www.worldbank.org

In special cases, both unemployment and inflation can show increased levels. This situation is known as “stagflation” and appears when inflation rate is rising and output is stagnant (Fig.5).

Figure 5: Phillips curve – stagflation in short-run



Source: http://www.economicsdiscussion.net/

Today the Phillips curve does not seem to be applicable in the initial form, considered to be too simple for the actual economic situation.

4. Conclusions

After a 2015 with economic improvement, despite a GDP growth rate below expectations, prospects show that the future period will be prosperous but the aggregate demand and global trade are expected to be low, wages will record a moderate growth and productivity will increase slowly.

Because the oil price is expected to remain low in 2016 and to show a modest increase in 2017, commodity prices will also remain low, causing problems for important oil exporters and for the extraction industry but encouraging for public consumption.

Geopolitical problems will cause diminishing confidence for some economies and capital inflows will decline. China's economy will slowdown, while US ecnomomy will grow. Gradual improvement will be noticeable in countries in economic distress like Russia and Brazil.

Countries must deal with challenges concerning unemployment, pollution, poor life quality and acces to education, investments and energy efficiency.

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