

DISPOSABLE INCOME, SAVINGS AND CONSUMPTION OF THE HOUSEHOLD SECTOR - INDICATORS OF THE COUNTRY'S DEVELOPMENT LEVEL

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ABSTRACT

GDP allocation by the expenditure principle of the GDP formation, i.e. in accordance to the so-called distribution by the purpose shall determine the part of personal (individual) consumption of citizens and households (C), part for firms and household's savings or investments (I), the government expenditures (G) and some part for export (eXport-iMport). This allocation that GDP "is apportionment" for specific needs in terms of the market economy is performed under impact and application of market principles, but with more or less, directly or indirectly influence of the state. This paper elaborates mutual relations among mentioned categories and economic development.

Key Words: disposable income, savings, consumption, development, unemployment, wages

INTRODUCTION

Disposable income, savings and consumption of the household sector are important indicators of the country's development level. Disposable income is the difference between inflows (employees incomes, an estimation of the private transfers, the income of individual producers, social transfers, income from dividends, banks interest payments, income from property and property rights, royalties, capital gains, income from lucky dips and other prize games and interest payments on government securities) and outflows (total social contributions, remittances, personal income tax and interest payments) of the population. So formed disposable income realized a part used for consumption and some part for savings. The rate of household saving ratio is the gap between personal consumption and disposable income. That rate of savings could be used as one of the indicators that determine the level of the nation living standard, i.e. through which the level of the country's economic development and opportunity for sustainable development of the national economy is determined.

In that context the paper theme inevitably cover issues of unemployment and labor productivity, trends of the nominal net wages, real growth rate of the nominal net wages and inflation, while keeping in mind the recent crisis disturbances that hit the world economy. And, the paper examines the mutual connection of the aforementioned categories using data for their condition and trends in FYR Macedonia, but also through comparative analysis of some European countries and the EU. Categories of disposable income, savings and consumption of the household sector are categories-dependent, but also they are conditioning the level of the country's economic development. The final goal of the paper is to determine the level of living standards and economic development by analyzing the underlying relationships in the distribution between consumption and savings of the household sector, and to identify recommendations for optimizing the specified relationship. The paper analyzes the situation in several European countries and compares them with the conditions of the said categories in EU countries.

THE REAL POWER OF DEVELOPMENT FACTORS

Economic development is a very complex process. It occurs with varying intensity in time and space depending on the strength of the factors that condition it. Economic development is expressed through the constant growth of production and employment, through improving the economic structure and through growth of the population life quality. Economic development is a process in which objective laws and principles are embedded, and they influence many categories, overriding the will of the people. The changes that are noted as construction of new production capacities, stores, roads and various others infrastructure facilities, purchase of new equipment in factories, buildings, apartments, increasing of population purchasing power (earnings are enough to purchase more products for permanent use or consumption), and more to meet spiritual needs, needs for sports, recreation and entertainment, etc., everything that appears related to economic development. The benefits of economic development are more versatile. Generally, they are reduced to increase of the general level of economic development of the country that ultimately leads to a general improvement in living conditions and material and cultural development.

The economic theory has long pointed to capital, labor and land, or the means of work, labor and the subject of work as factors of production in the sense that for each production are necessary these three conditions as fundamental. Apart from these factors, a great impact on the economic development also have the factors of socio-political nature, in that sense the role of the state, then the market mechanism and competition, entrepreneurship and managerial capability of managers and other factors. This means that first we could conclude that the factors that determine economic growth are numerous, further we can conclude that all factors have not equal importance to economic development, but they have different specific weight (different relative importance). When we tried in the modern development to rank development factors, the analysis would surely have found technical and technological progress as an important general factor, and the available income and savings as basic sources of capital for investment.

CAPITAL AND ECONOMIC DEVELOPMENT

Capital or sources of investment are among the most important factors for economic development. Lack of capital is a very big problem in developing countries and regions in development. The capital has a particularly high relative importance in undeveloped and in developing countries. In these countries the lack of capital is a very problematic in their development process.

The main source of investment funds for the further economic development of each national economy is a savings of gross domestic product. Own accumulation is a major source of investment funds for economic development, but only if it is activated in an efficient manner. Historical fact is that all countries had gone through a stage of initial accumulation of capital in terms of capital formation (investment funds) by limiting the personal and common consumption of one layer of the population or the entire nation. This legitimacy is valid for all national economies. There is an additional source of investment. That is the possibility of borrowing foreign capital in the form of government loans and bank loans or joint ventures of domestic and foreign firms. This means that in terms of lack of domestic accumulation, objective need of using external accumulation or foreign investment funds appear. Foreign funds can be in a form of loans and credits from international financial institutions and foreign countries, then as joint ventures of domestic and foreign firms, in the form of donations and in various forms of technical assistance. Especially significant are the funds provided by international financial institutions such as the World Bank and International Monetary Fund.

LIVING STANDARD AND INVESTMENTS THROUGH THE EXPENDITURE METHOD OF GDP FORMATION

Expenditure method reveals for what purposes GDP is spent. Thus GDP can be “apportionment” for specific needs as:

- Final consumption, which consist of:
 - Individual (personal) consumption and
 - Public Consumption.
- Gross investments, which consist of:
 - Investment in fixed assets, and
 - Investment in working capital or stocks growth.
- Exports of goods and services.

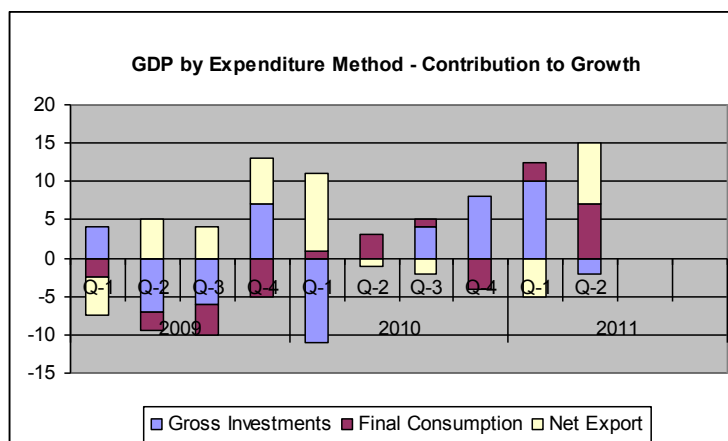
Living standards and investment are intertwined concepts. Using new investments, some basic problems are solved:

- population growth employment;
- solving the issue of agrarian overpopulation (in poorly developed countries);
- increasing the living standard;
- reducing disparities in economic development in relation to developed countries.

If we take into consideration that countries tend to raise the level of development have a relatively large need for investments in opening new jobs, it is clear that there many problems popping up to address these issues. Having in mind the population growth and low national income in these countries, and in order to ensure employment of the population growth and to maintain constant standard of living, it is at least one tenth of national income to be allocated for investment. Resolving other issues requires this percentage to increase to half of national income. Therefore in this category of countries the minimum limit of investments can jeopardize the minimum limit of personal consumption, if not ensure maximum rationality in spending money, and if the country not get international support.

Analyzed according to the expenditure side of GDP, GDP growth in FYR Macedonia is characterized by positive contribution of net export and domestic demand. The highest rate of real growth has been recorded by the export of goods and services, 8.9%. Lower growth of import of goods and services of 4.5% implies a positive contribution of net exports to economic growth. Moreover, there was a slowdown in real growth of foreign trade in the Quarter-2, despite high nominal steady growth over the same period, which explains the sharp rise in prices of stock products (Quarterly Economic Report K-2-2011, FYR Macedonia, Ministry of Finance:3). The Figure 1 shows the GDP by expenditure method for 2009, 2010 and 2011.

Figure 1
GDP by Expenditure Method - Contribution to Growth



Source: SSO and MF calculations

The positive contribution of domestic demand is the result of personal consumption, which in the Quarter-2 registered growth of 8.4%. Growth in personal consumption is in line with movements in the trade and collection of value added tax, as the growth of domestic production of consumer goods. On the other hand, public consumption registered a slight decline of 0.6% after falling of 3.2% in the previous quarter. After the growth of 60% in the previous quarter, gross investments in Quarter-2 registered negative growth of 7.5%. Indicative indicators, however, show positive trends in investments. Thus, domestic production of capital goods in Quarter-2 of 2011 recorded real growth of around 50%. Imports of investment goods registered a nominal growth of around 19%, while capital budget expenditures registered growth of around 80% (Quarterly Economic Report K-2-2011, FYR Macedonia, Ministry of Finance:4).

SAVING RATE, DISPOSABLE INCOME AND PERSONAL CONSUMPTION OF HOUSEHOLD SECTOR - CURRENT SITUATION

In 2010, the EU-27's GDP recovered partly from the effects of the 2008 global financial and economic crisis. It increased to EUR 12.268.000 million in 2010 from EUR 11.770.000 million in 2009. This was however still below the pre-crisis level of EUR 12.479.000 million in 2008 and even below the level of 12.390.000 million reached in 2007. The euro area accounted for 74.9% of this total in 2010, while the sum of the five largest EU economies (Germany, France, the United Kingdom, Italy and Spain) was 71.2% (According to European Commission, *Data from September and October 2011, Eurostat Information*). In FYR Macedonia, gross domestic product in the first quarter of 2011 grew at quarterly and annual basis by 0.4% (seasonally adjusted on the basis, despite 2.3% in the last quarter of 2010, on seasonally adjusted basis) and 5.1% respectively. High annual growth is the result of increased domestic demand, partially offset by growth in the deficit in foreign trade. Growth in the export sector causes increase of the investment activities of domestic and foreign private investors, which complement investments by the state. These achievements have led to strong annual growth of investment by 60.1%. In the same quarter personal consumption was back in the zone of positive change, achieving annual growth of 3.9%, indicating perceptions of short-term effect of higher price level. On the other hand, public consumption declined and had a small negative contribution to overall economic growth (Quarterly Report, NBRM, July 2011:22).

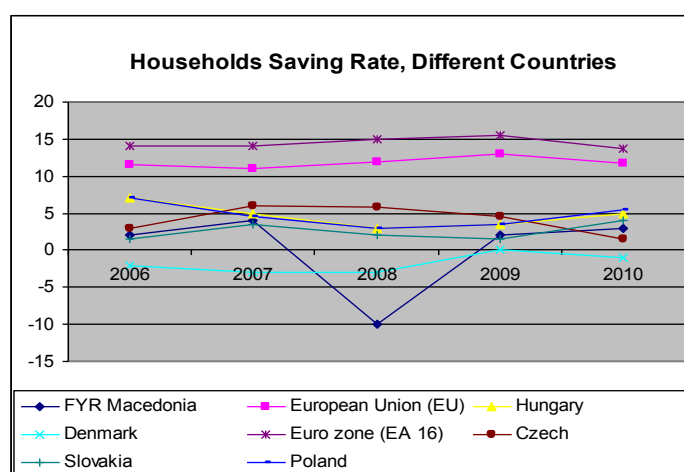
Table 1
Annual rates of Real Growth (%)

	2008	2009	2010	2011 (Q-1)
Personal Consumption	7.1	-4.7	0.4	3.9
Public Consumption	10.6	0.5	-0.4	-3.2
Gross Investments	5.4	-1.5	-3.7	60.1
Export of goods and services	-6.3	-16.2	23.4	34.8
Import of goods and services	0.8	-15.0	10.9	36.5
Domestic Consumption	6.7	-3.3	-0.1	10.3
Net Export	14.7	-14.0	-9.8	39.6
GDP	5.0	-0.9	1.8	5.1

Source: State Statistical Office and NBRM calculations

The positive gap between disposable income and personal consumption in 2010 cause the rate of household savings to reach the level of 2.6% which is higher by 0.8 percentage points from the level in 2009. However, compared to rates of saving in other countries, it is far lower, with the exception of the Czech Republic and Denmark. In 2010, disposable income continued to grow at a sluggish pace, but still had a significant annual growth.

Figure 2
Households Saving Rate, Different Countries

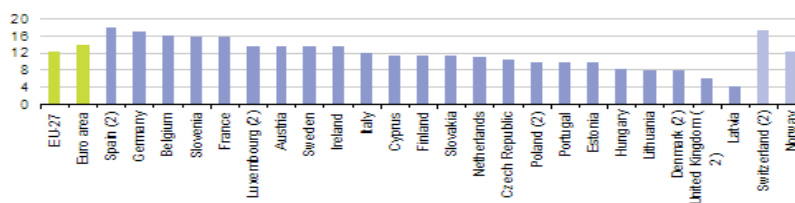


Source: NBRM, State Statistical Office and OECD Economic Outlook No.88 (data for individual countries are estimates)

The main drivers of growth of the disposable income are private transfers, and the growth of the mass of wages. In conditions of slow dynamic of growth of average net wages, the growth of the mass of wages due to higher employment.

Gross national saving as a proportion of national disposable income averaged 19.6% in the euro area (of 13 countries) in 2010 and among the EU Member States reached its highest in Austria (25.0%) and Romania (24.9%) and lowest in Greece (4.0%). Compared with 2000, there was a relative decline in gross national savings for the euro area and most of its members, the exceptions being Germany, Estonia and Austria where savings increased. The most substantial decreases (in percentage point terms) were in Ireland, Portugal, Finland and Greece where savings as a proportion of disposable income fell by 7 percentage points or more, while the largest increases were recorded in Bulgaria and Romania where the proportion increased by 11 points and 9 points respectively. The household saving rate in 2010 was 1.4 percentage points higher in the euro area (13.7%) than in the EU-27 (12.3%). This gap is mainly explained by the relatively low saving rate of the United Kingdom (6.0%, 2009 data) and the high rates in Spain (18.1%, 2009 data) and Germany (17.1%). Among the Member States within the euro area, eight (including two with data from 2009) had household saving rates above the EU-27 average and seven below, with two (Greece and Malta) not available. The highest household saving rate among the EU Member States not in the euro area was recorded in Sweden (13.4%).

Figure 3
Household saving rate (gross), 2010 *



(1) Bulgaria, Greece, Malta and Romania, not available.
(2) 2009.
Source: Eurostat (online data code: nas_a_ki)

Personal consumption - Personal consumption, which had previously noted a significant decline in quarterly and annual basis, in the first quarter of 2011, was back in the zone of positive growth rates. On annual basis (2011/2010) is increased by 3.9%. Positive trends were confirmed by indicators of personal consumption. Namely, real annual growth is recorded in VAT revenues; imports of consumer goods registered a real growth with a similar intensity as in the previous quarter, while domestic production of consumer goods achieved strong growth of 8.2%. Although, because of higher inflation in the first quarter of 2011, wages and pensions as the main sources of financing the consumption registered a real decline, and private transfers from abroad were also reduced, however, favorable perceptions of the future growth of the economy and perceptions of short-term effect of higher domestic prices conditions positive trends in the labor market and the credit market. During this period, there was an increase in employments of around 5% which initiates an increase in consumption, and facilitates the conditions for approving consumer credits to household sector (According to a survey of credit activity of NBRM, conducted in April 2011), which also produces increased consumption.

The consumption expenditure of households accounted for at least half of GDP in the majority of EU Member States in 2010. This share was highest in Greece (75.4%), Cyprus (74.6%) (both 2009 data), and Malta (69.5%). In contrast, it was lowest in Luxembourg (37.2%, 2009 data) which had, nevertheless, by far the highest average household consumption expenditure per capita (PPS 23.800, 2009 data). See Table 2. More detailed data on the structure of total household consumption expenditure in the EU-27 in 2009 show that nearly a quarter (22.9%) was devoted to housing, water, electricity, gas and other fuels, Transport expenditure (13.2%) and expenditure on food and non-alcoholic beverages (13.1%) were the next important expenditure categories. All other consumption expenditure together accounted for about half of the total (According to European Commission, *Data from September and October 2011, Eurostat Information*).

Table 2
Consumption Expenditure of Households (Domestic Concept), 2000, 2005 and 2010 *

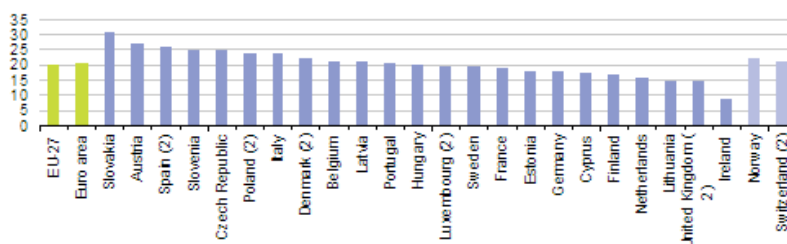
	As a proportion of GDP (%)			Per capita (PPS)		
	2000	2005	2010	2000	2005 (1)	2010 (2)
Belgium (3)	51.8	49.7	50.7	12 400	13 400	13 900
Bulgaria	71.3	69.5		3 900	5 700	
Czech Republic (3)	54.5	50.8	51.9	7 100	8 700	10 000
Denmark	47.0	47.6	48.1	11 800	13 200	13 700
Germany (3)	56.2	56.4	56.4	12 600	14 700	15 300
Estonia (3)	80.0	58.4	52.9	5 100	8 100	7 900
Ireland	47.1	43.7	46.5	11 900	14 200	13 900
Greece (3)	75.7	75.5	75.4	12 700	15 500	16 600
Spain (3)	63.1	60.1	58.3	11 700	13 800	14 200
France	55.1	55.6	56.4	12 100	13 800	14 200
Italy (3)	61.1	59.7	60.4	13 600	14 100	14 800
Cyprus (3)	83.4	75.8	74.6	14 100	15 500	17 300
Latvia (3)	60.7	60.3	60.3	4 200	6 800	7 300
Lithuania (3)	65.6	65.3	67.9	4 900	7 800	8 700
Luxembourg (3)	46.6	41.6	37.2	21 700	23 800	23 800
Hungary (3)	52.4	55.3	55.4	5 500	7 800	8 200
Malta	76.5	75.1	66.6	12 200	13 300	13 200
Netherlands	48.2	47.7	44.8	12 600	14 000	13 800
Austria (3)	55.8	56.0	55.4	14 000	15 600	16 200
Poland (3)	63.8	62.7	60.6	5 900	7 200	8 600
Portugal	64.6	65.6		10 000	11 700	
Romania (3)	67.6	68.6	61.1	3 300	5 400	6 600
Slovenia (3)	59.2	57.1	58.5	9 000	11 200	12 100
Slovakia (3)	56.1	56.4	59.6	5 400	7 600	10 300
Finland	47.7	49.4	51.6	10 600	12 700	13 900
Sweden	47.0	46.5	48.3	11 400	12 700	13 500
United Kingdom	62.4	61.6	62.0	14 200	16 900	16 400
Iceland	55.6	53.9	48.8	13 900	15 800	13 500
Norway	40.9	39.5	40.3	12 800	15 600	16 600
Switzerland (3)	58.8	56.8	56.8	16 200	17 300	19 200
FYR of Macedonia (3)	76.9	78.7	78.5	3 900	5 200	6 600
Turkey	74.9	75.6	75.0	6 000	7 200	8 000

(1) 2005, break in series.
(2) Slovenia, break in series.
(3) 2009 instead of 2010 data.
Source: Eurostat (online data code: nama_fcs_c)

Investment expenditure - One of the main drivers of GDP growth is certainly an increase in investment activity. Despite the fall in investment activity in FYR Macedonia on a quarterly basis (8.3%, seasonally adjusted) gross investments in the first quarter of 2011 record high real annual growth of 60.1% (26.3% in the previous quarter). This strong annual change is largely due to the low comparison base (In the first quarter of 2010, investments recorded the strongest annual decline (47%) and reached the lowest level since the first quarter of 2006 onwards), but also reflected a more positive contribution of more economic factors. The significant stimulus by state investment conditions high growth of domestic production of capital goods and the value of completed construction works. Moreover, foreign direct investments (in equity) increased repeatedly, indicating reduced risk aversion of foreign investors and favorable perceptions of the domestic economy. Increased investment condition increased imports of means of work, and were aided by a moderate strengthening of credit activity directed toward the corporate sector, partly facilitating lending and increased demand for loans (According to the survey of the credit activity of NBRM, conducted in April 2011). In the remainder of 2011 is accomplished little real growth of investments on a quarterly basis, which contributes to their further annual growth, but with a reduced pace.

Figure 4 shows that in 2010, the business investment rate was 20.0% in the EU-27. The highest rates among the Member States were recorded in Slovakia, Austria, Spain (2009 data) and Slovenia, all above 25%; the lowest rate, by far, was recorded in Ireland (8.6%). The business investment rates of the five largest EU-27 economies diverged quite significantly: in Spain and Italy the rates were clearly above the EU-27 average, while in France, Germany and the United Kingdom they were clearly below the average. The business investment rate fell in nearly all EU Member States (with 2009 and 2010 data available); however, it increased by 3.1 percentage points in Slovakia, by 1.5 points in Italy and by smaller amounts in France and Germany. Overall, the rate fell by 0.3 percentage points in the EU-27 between 2009 and 2010, with particularly large reductions in Ireland and Hungary (4 points or more) (According to European Commission, *Data from September and October 2011, Eurostat Information*).

Figure 4
Investment rate (gross) of non-financial corporations, 2010 (%) *



(1) Bulgaria, Greece, Malta and Romania, not available.

(2) 2009.

Source: Eurostat (online data code: nas_a_ki)

The household investment rate in 2010 was 8.1% in the EU-27. This rate ranged from 5.0% in the United Kingdom to 10% or more in Belgium, the Czech Republic, the Netherlands and Finland, with Latvia (3.8%) and Lithuania (3.2%) below this range. The household investment rate was relatively unchanged in the EU-27 and the euro area in 2010, when compared with the year before.

CONCLUSION

Every production process and each economic activity in general, its sense found in consumption, i.e. have the goal to meet specific needs in the sphere of consumption. According to the expenditure distribution of the aggregate macroeconomic categories, i.e. according to the expenditure principle of GDP formation, the consumption is determined by two important items: personal consumption and public consumption. The other component of GDP are investments arising from the part of the savings or accumulation. This part defines production consumption intended for renewal and expansion of production capacities. Therefore, the direct connection between the country development level and investments is quite clear. But at the same time, the amount of disposable income and personal consumption show inversely proportional connection with investments, so in that sense they also condition the level of economic development of every economy. This paper makes a comparative analysis of the mentioned categories in FYR Macedonia and the EU Member States

and the Union as a whole. In addition, the paper follow recent years in which these relations are complicated in terms of crisis disturbances started in 2008. Monitoring and analysis of these categories is derived from the need to achieve more substantial goals, including: accelerating growth, creating jobs and implementing training programs and retraining and building an efficient system of social protection.

Anderson, M., Bechhofer, F. & Gershu, J. (1994). *Social and Political Economy of the Household*. Oxford University Press

Blundell, R. W., Preston, I. & Walker, I. (1994). *The Measurement of Household Welfare*. Cambridge University Press

Mojsoski, V. & Karadjova, V. (2002). *Applied Economy*. Ohrid. CNIR FTU.

Sowell, T. (2004). *Applied Economics: Thinking Beyond Stage One*. New York. Basic Books.

Ministry of Finance, FYR Macedonia, Quarterly Economic Report K-2-2011

NBRM, Quarterly Report, July 2011

NBRM, Report for Financial Stability of FYR Macedonia in 2010, June 2011

http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Main_Page [Accessed the 21th of January 2012, 23:25]

[http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Household_saving_rate_\(gross\),_2010_\(1\)_\(%25\).png&filetimestamp=20120110102643](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Household_saving_rate_(gross),_2010_(1)_(%25).png&filetimestamp=20120110102643) [Accessed the 21th of January 2012, 23:55]

[http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Consumption_expenditure_of_households_\(domestic_concept\),_2000,_2005_and_2010.png&filetimestamp=20120110102135](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Consumption_expenditure_of_households_(domestic_concept),_2000,_2005_and_2010.png&filetimestamp=20120110102135) [Accessed the 22nd of January 2012, 15:05]

[http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Investment_rate_\(gross\)_of_non-financial_corporations,_2010_\(1\)_\(%25\).png&filetimestamp=20120110102657](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Investment_rate_(gross)_of_non-financial_corporations,_2010_(1)_(%25).png&filetimestamp=20120110102657) [Accessed the 22th of January 2012, 16:35]