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ECONOMIC AND SOCIAL DIMENSIONS OF SUSTAINABLE DEVELOPMENT IN THE EUROPEAN UNION

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Abstract. *These below lines chose to develop the larger sustainable development topic through the social-economic dimension, which is just a part of the entire. There will be first concept exposure, then observation throughout the first and half decades of 2000s. Eurostat's calculation methodologies and statistics were helpful for the EU area. Conclusions of our below analyses might further deepen on either the other sustainable development's dimensions, or on explanatory indicators.*

Keywords: *development, regional development, sustainable development, types of regions, Euro- regions*

Jel Classification: *I31, I32, J21*

1. Headline indicators of sustained development

More than 130 indicators have been identified as headline indicators, and among them: real per capita GDP, growth rates, resource productivity, persons at-risk-of-poverty and social exclusion, employment rate of older workers, healthy life years and life expectancy at birth, the same by sex, greenhouse gas emissions, primary energy consumption, energy consumption of transport relative to GDP, official development assistance as share of gross national income... These are intended to work out an overall picture explaining how much the European Union has really performed progress in terms of sustainable development objectives and identifying strategy targets for. In order of a more complete picture, it is necessary to look at the dynamic of all indicators within a theme, e.g.: socio-economic development, sustainable consumption and production, social inclusion, demographic changes, public health, climate change and

energy, sustainable transport, natural resources, global partnership, good governance¹.

2. Sustainable socio-economic development

This is a basic element of the EU's sustainable development corresponding strategy. This strategy sets out the objective of promoting a prosperous, innovative, knowledge-rich, competitive and eco-efficient economy providing high living standards and full and high-quality employment throughout the European Union. By promoting a prosperous, innovative, knowledge-rich, competitive and eco-efficient economy that provides high living standards and high-quality employment, socio-economic development aims to harmonize the three main **pillars of sustainable development**: economic development, protection of the environment and social justice.

Gross domestic product (GDP) is the best-known measure of macro-economic activity and is seen by some scholars as a proxy indicator for societal progress. However, by design and purpose, this indicator cannot be relied to inform on all policy-related issues and its deficiencies as a measure of well-being have either been increasingly recognized. GDP stays closely related to a number of issues highly relevant for economic development, such as employment or R&D² investment. Reflecting changes in consumption and production patterns, the GDP growth is equally linked to the resource use and climate change, especially when not matched by similar increases in resource efficiency.

The economic dimension of socio-economic development is analyzed in view of investment, disposable household income, net national income and household saving. Investment directly affects the economic prosperity since contributing to capital accumulation and to capital goods, physical capital or the same as knowledge.

Disposable household income is an important means for achieving higher living standards, so is crucial for pursuing the social objectives of sustainable development. **Household saving** also has an important role, in ensuring resources and opportunities to share fairly between generations. It determines the amount of financial resources available to invest in improving the stock of productive, natural and human capital.

An economy's capacity for **innovation, competitiveness and eco-efficiency** is analyzed through indicators on R&D, labor productivity, eco-innovation and energy intensity. **R&D expenditure**, through its links to education, innovation, employment, labor productivity and economic growth is crucial for the prosperity and competitiveness of EU economies..

¹ Some details of socio-economic development will be discussed below, with afferent factors.

² Research and development (R&D).

Labor productivity is, in its turn, an important determinant of an economy's future competitiveness and long-term economic growth.

Sustained economic growth, however, if not counterbalanced by eco-efficiency improvements, can damage the natural environment, thus significantly affect well-being in the long run. Also, economy's energy intensity is important in this respect due to that it highlights progress in the decoupling of economic growth from environmental degradation.

Employment is essential for the well-functioning and competitiveness of economies. Rising employment can help society to become more inclusive by reducing poverty and inequality in and between both regions and social groups. In contrast, high and persistent unemployment can lead to social exclusion, degradation of individual skills and increased poverty, which in turn slows economic growth. Young people are particularly vulnerable to weak economic conditions. Improving their education and employment opportunities is key to social inclusion and the sustainability of our economic systems.

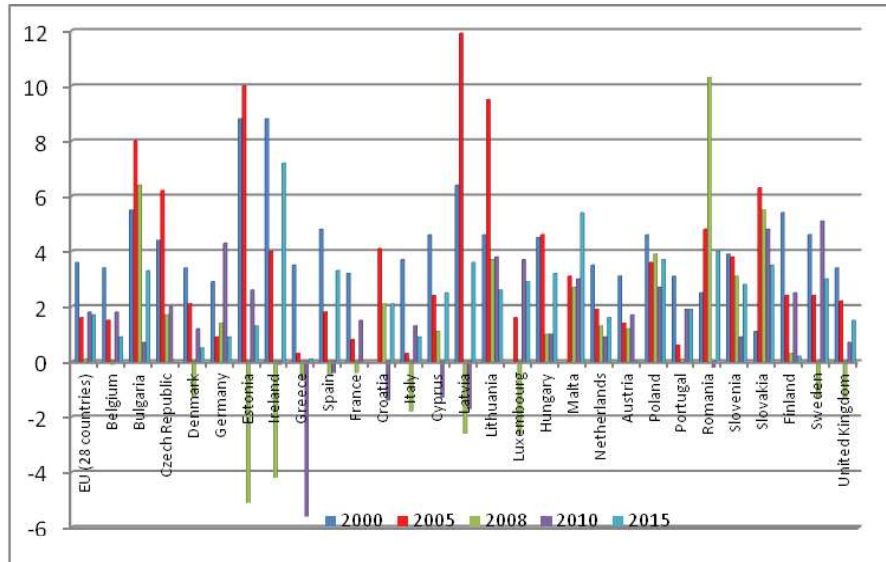
3. Real developments in the area.

3.1 Per capita gross domestic product (GDP)'s evolving

Recent changes in real per capita gross domestic product GDP indicate some fragile recovery under way. Real per capita GDP in the EU area continuously grew at a 2.2 % a year rate on average along the 1995-2007 interval. This trend reversed when the economic crisis in late 2008 and in 2009 a 4.7 % GDP decline was recorded. This was the highest one-year drop of the past two decades. Then, the more recent developments tried to be different. Between 2009 and 2011, real per capita GDP raised again, up to a moderate 1.6 % per year on average rate. Then, between 2011 and 2013, economic activity met a new decrease of 0.8 % a year, before returning to positive growth in 2014.

As the same for the interval between 2000 and 2014, the real per capita GDP grew by 0.9 % a year on average, which is an upward long term trend. In the short term, since 2009, the average annual growth rate has been slightly lower at 0.7 % due to the protracted effects of the economic crisis. It should be noted that real GDP per capita has developed differently across EU Member States. Some national economies, particularly the ones that had accumulated large macroeconomic imbalances before 2008, have been more exposed to effects of the crisis and so experienced larger drawbacks in 2008-2009 and 2012-2013 intervals. Other national economies have concomitantly shown less affected (see also Figure 3.1. /1).

**Figure 3.1/1. Real GDP per capita, growth rate*
Percentage change on previous year, EUR per inhabitant**

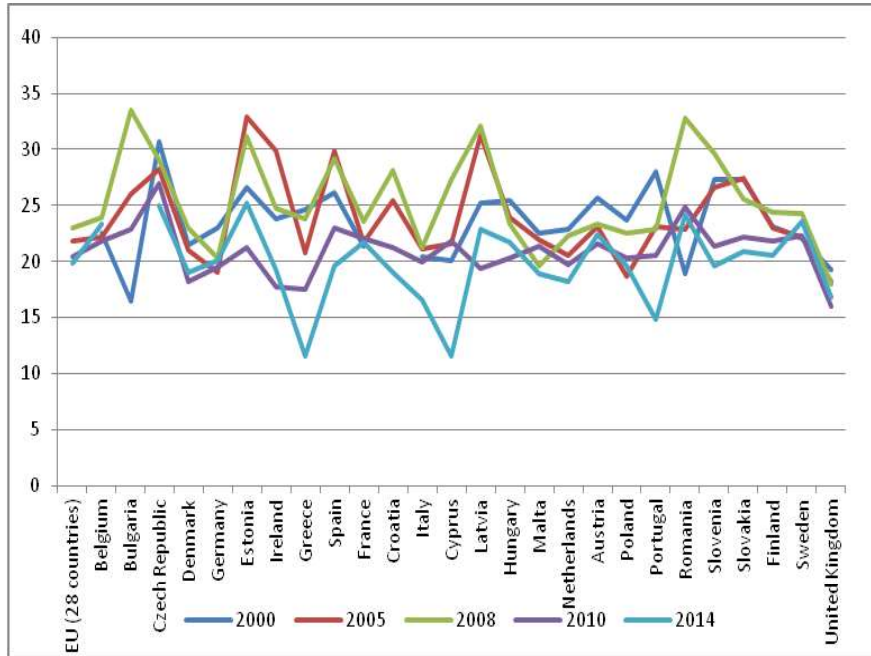


Data source: Eurostat

3.2 Developments of investment by institutional sectors in GDP percentages

It seems that the part of GDP used for total investment in the EU (Figure 3.2/1) has closely followed the economic business cycle. Between 2002 and 2007 investment grew continuously, reaching a peak of 23.0 % of GDP in 2007. Since the economic crisis of 2008, however, the indicator met a downward trend. Over the long-term 2002- 2014 period, it fell by almost two percentage points, i.e. 21.7 % - 19.8 %. This was mostly due to a steep fall in business investment in 2009 and to a decline in household investment. Total investment was further reduced by a decline in government investment during the 2009-2014 intervals. Note that total investment had been improving in most EU countries before the crisis. Romania, Latvia and Estonia were the strongest performers, increasing their investment as a share of GDP by ten or more percentage points between 2000 and 2007. However, as a result of the crisis total investment was halved in Cyprus, Greece and Ireland and was strongly reduced in Spain and Portugal. Loss of investor confidence was also strong in Slovakia, Lithuania and Latvia.

Figure 3.2/1 Total investment*(% of GDP)

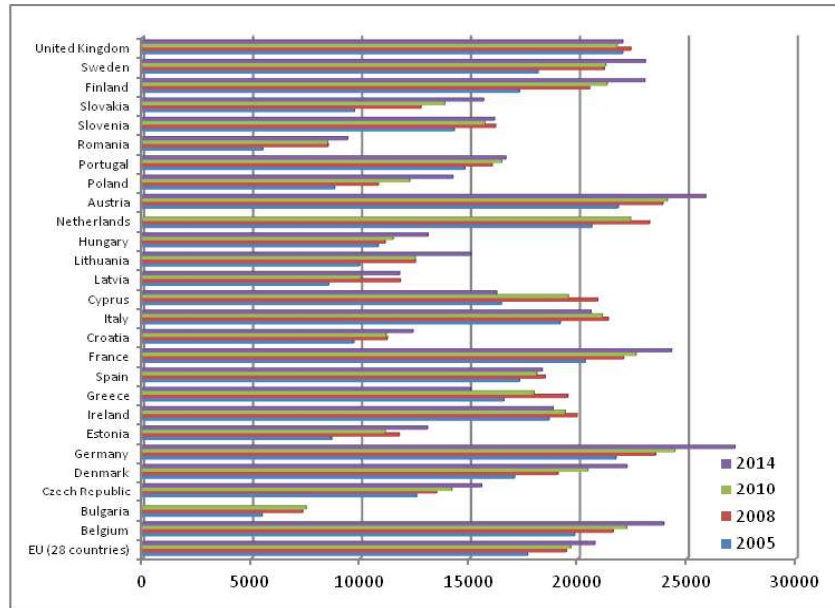


Data source: Eurostat

3.3 Households’ proper related real adjusted per capita gross disposable income

As belonging to households, this indicator refers to the income available to households for spending and saving after paying taxes. It includes social benefits and social transfers in kind -- goods and services provided by the government, such as education and healthcare. In the long run, disposable per capita household income in the EU expressed in purchasing power standards (PPS) has increased markedly, from 16,366 PPS in 2003 to 20,307 PPS in 2013. Progress was slower in from 2008 to 2013, due to effect of the economic crisis on labor market conditions and social spending. This short-term slowdown in growth put more people at risk of poverty and social exclusion and has increased the long-term unemployment rate.

Figure 3.3 Real adjusted gross disposable incomes of households per capita*

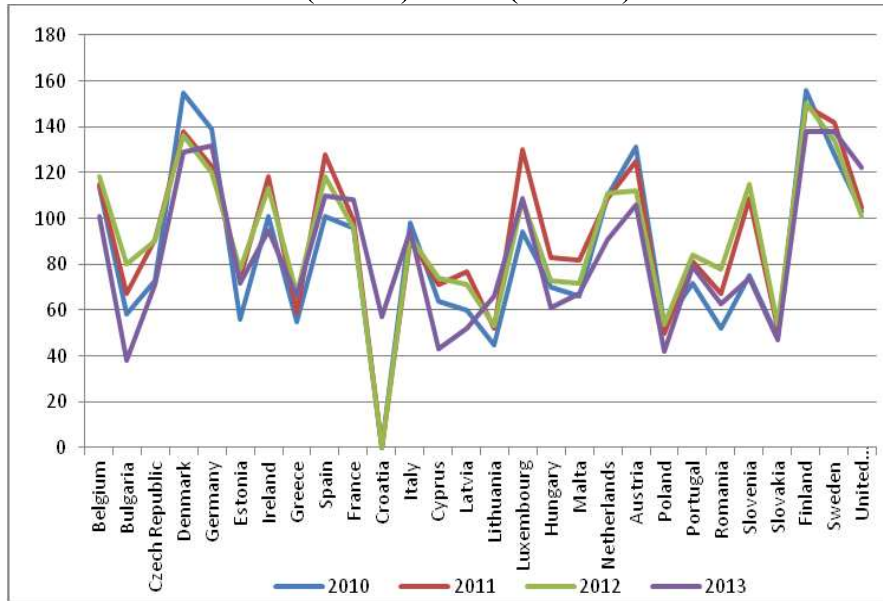


Data source: Eurostat

3.4 Eco-innovation

Eco-innovation refers to development of new or significantly improved products (goods and services) or organizational practices that reduce the use of natural resources and decrease the release of harmful substances throughout the entire life cycle. It plays an important role in addressing environmental challenges without compromising economic and social objectives. Eco-innovation brings new products to the market, contributing to economic activity and job creation. The eco-innovation index shows how well individual Member States perform in eco-innovation compared with the EU average. It is based on 16 indicators in five areas: eco-innovation inputs, eco-innovation activities, eco-innovation outputs, environmental outcomes and socioeconomic outcomes.

Figure 3.4 Eco-innovation index*/The Eco-Innovation Scoreboard (Eco-IS)/ Index (EU=100)



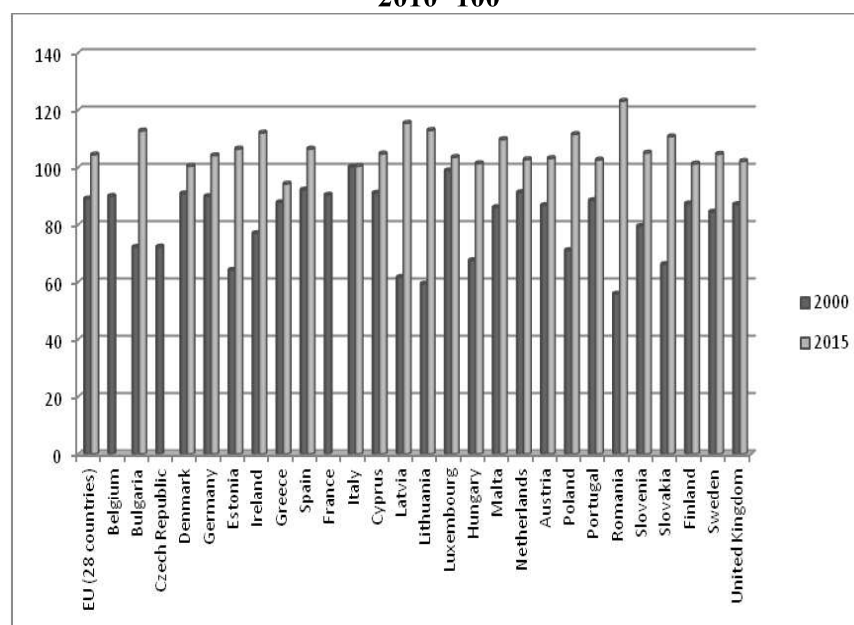
Data source: Eurostat

3.5 Labour productivity

Seen as the output of workers per hour worked, labor productivity in the EU increased continuously between 2000 and 2007. This trend was interrupted by the start of the economic crisis in 2008 and the following deterioration of economic conditions. As a result, labor productivity in the EU fell from EUR 31.3 per hour worked in 2007 to EUR 30.7 in 2009. A slowdown in productivity during crises could reflect weak investment under conditions of high economic uncertainty, resulting in slow capital accumulation. Weak productivity could also result from companies retaining labor during the downturn, leading to underuse of labor and spare capacity. In 2010, labor productivity rebounded to its pre-crisis level and continued to grow in the following years

Almost all Member States benefited from increased labor productivity between 2000 and 2013. The only exception was Luxembourg where productivity fell marginally. Improvements in labor productivity were most pronounced in Latvia (100 %), Lithuania (89.3 %), Romania (86.7 %), Estonia (62.9 %) and Slovakia (61 %).

**Figure 3.5 Labour productivity per hour worked (ESA2010)
2010=100**



Data source: Eurostat

3.6 Employment and unemployment

3.6.1 Employment rate for persons aged 15 to 64, as measured by the EU's labor force survey (EU LFS and see Figure 3.6.1), stood at 64.9%. Although the indicator raised again in 2014 and the EU is off-track to meeting the Europe 2020 target to reach a 75% employment rate by 2020. The EU-28 employment rate rose in 2008 to 65.7% and then lowered during next years to stand at 64.1% in 2010. This decrease during the global financial and economic crisis — a total fall of 1.6 percentage points — was followed by a period of stability between 2010 and 2013 during which the EU-28 employment rate was as high as 64.1-64.2%. Finally, in 2014, the employment rate returned to the upward path noticed prior to the crisis moment, namely increasing by 0.8 percentage points since 2013 to reach 64.9%.

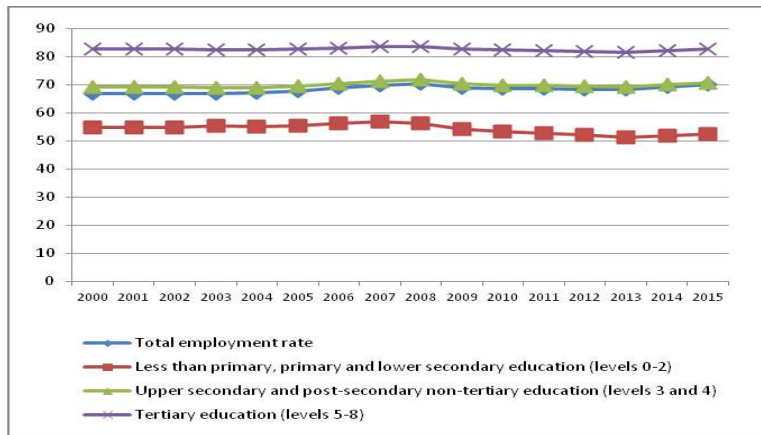
Between the start of the crisis in late 2008 and 2014 (the latest data available), there were considerable differences in the performances of the individual national labor markets. The overall employment rate for the EU-28 in 2014 remained 0.8 percentage points below its level of 2009; there

were 11 EU Member States which reported an increase in their respective rates.

3.6.2 Employment and education

Roughly, people with higher levels of education have better job prospects; the difference to be made is priority between those who have attained upper secondary education and those who haven't (Figure 3.6.2/1). In all countries, tertiary graduates are more likely to be in work than non-graduates. Concomitantly, men generally have higher employment rates than women; the gap being especially large among people with low levels of education.

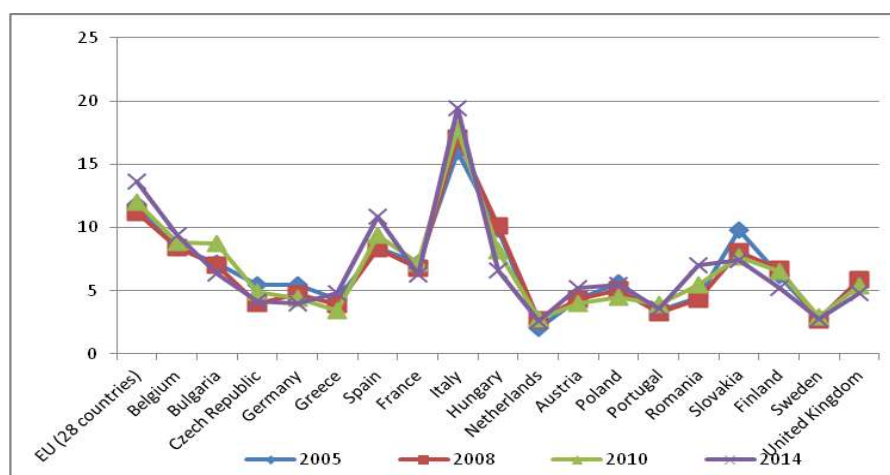
Figure 3.6.2/1 Employment rate by educational attainment level in E.U.* (%)



Data source: Eurostat

Then, employment rates also vary considerably according to different levels of educational attainment: for statistics on this issue employment rates are based on the age group 25 to 64 rather than 15 to 64. The employment rate of those who had completed a tertiary (short-cycle tertiary, bachelor's, master's or doctoral levels (or equivalents)) education was 83.7 % across the EU-28 in 2014, much higher than the rate (52.6 %) for those who had attained no more than a primary or lower secondary education. The EU-28 employment rate of persons with at most an upper secondary or post-secondary non-tertiary education was 73.4 %. The largest falls in employment rates since the beginning of the financial and economic crisis (comparing 2008 with 2014) were witnessed for persons with at most a primary or lower secondary education, while smaller falls were observed for persons with a tertiary education and persons with at most an upper secondary or post-secondary non-tertiary education .

Figure 3.6.2/3 Territorial (regional) dispersion of employment rates, from total*



Data source: Eurostat

3.6.3 Men and women employed

Employment rates are generally lower among women and older workers. In 2014, the employment rate for **men** stood at 70.1 % in the EU-28, as compared to the same 59.6 % for **women**. A longer-term comparison shows that while the employment rate for men in 2014 was below its corresponding level 10 years earlier (70.3 % in 2004), there was a marked increase in the proportion of women in employment — rising 4.1 percentage points from 55.5 % in 2004. Males' employment rates were consistently higher than those for women across all of the EU-28

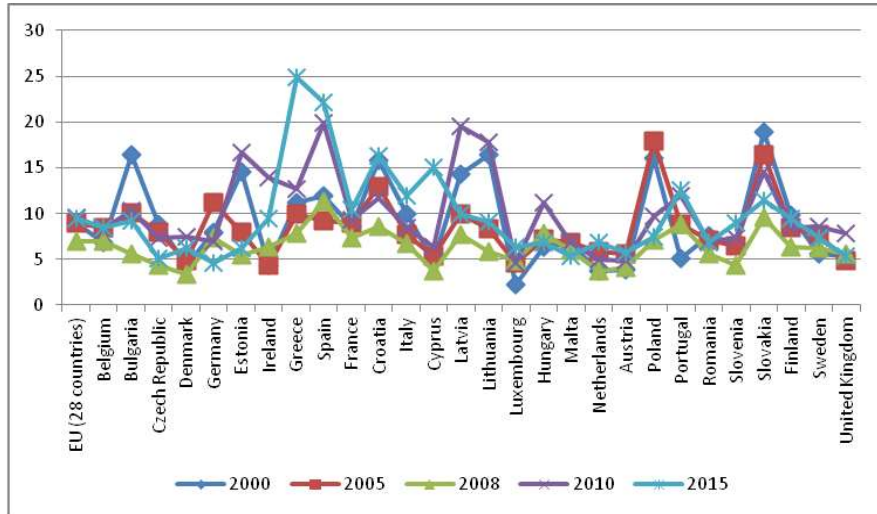
3.6.4 The unemployment, overall

Paid employment contributes to individual well-being by providing resources needed for decent living standards and the pursuit of personal goals and aspirations. High unemployment rates, on the other hand, can endanger social cohesion and increase the risk of poverty and social exclusion. Spells of prolonged unemployment among young people, in particular, can have adverse consequences for their career development as well as for the economy as a whole.

The unemployment rate measures the number of unemployed people as a percentage of the labor force. The labor force consists of all employed and unemployed persons in the 15 to 74 age group. Unemployed persons include people aged 15 to 74 who were: (1) without work during the

reference week, (2) available to start work, (3) actively seeking work -- i.e. who had taken specific steps in the four-week period ending with the reference week to seek paid employment or self-employment or who found a job to start within a period of at most three months.

Figure 3.6.4 Total EU unemployment rate* (%)



Data source: Eurostat

Since 2000, gaps in specific unemployment rates of men and women rather offset. In 2014, the gender unemployment gap was nearly non-existent, mainly as a result of the pronounced increase in male unemployment compared with a small increase in female unemployment during the economic downturn. In 2014, unemployment rates across the EU varied by more than 20 percentage points.

4. Closing remarks

Besides all of the above headline indicators proper to the social and economic dimension of the sustainable development, the last’s analysis ought to deepen on the so-called explanatory indicators, associated to the operational ones (here above). Each operational indicator is supposed to reach several explanatory indicators as its specific dimensions. Net national income, households’ saving rate, eco-innovation, energy intensity and dispersions of all kind are just some examples and individually associate to the above discussed operational indicators.

And not to be omitted that, besides its socio-economic dimension, the sustainable development pattern includes sustainable consumption and

production, social inclusion, democratic changes, public health, climate change and energy, sustainable transport, natural resources, global partnership and good governance.

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