

III.

Designing the criteria to adjust the minimum wage and the alternative scenarios to support the mechanism

Establishing an open and transparent minimum wage-fixing mechanism is a matter of extreme importance to the wage policy in Romania due to the number of employees who are affected, on one hand, and to the economic and social effects of this form of state intervention on the labour market, on the other. The section hereinafter discusses on indicators best practices section above and the theory put in relation to minimum wage changes, keeping in mind that in practice it is difficult to isolate the effects of one indicator from the influence of others. Statistical indicators are not meant to replace the social dialogue or negotiation, as mentioned in the previous section, they are intended rather to inform the Government and the social partners, on relevant, and systematic basis on the context the minimum wage is approached and its potential impact. They offer a transparent documented starting point for the negotiating process in accordance to different economic and social objectives the decision makers might have.

3.1 Methodological specifications

The section deals with the indicators used in the mechanism, both for the scenarios (the minimum wage setting mechanism) and for impact assessment. **The presentation focuses on the indicators de facto used in the scenarios and in the impact assessment**, but brief references are also made to other possible/potential ones. The distinction between social and economic criteria is also considered, the description aiming at the same time to offer a closer image on Romania's context related to minimum wage.

Table 3.1 Indicators used and their role in the minimum wage setting mechanism

Criterion	Sub-criterion	Indicator	Function
Social criterion	General level of wages	Average gross wages	Criteria for minimum wage setting
		Ratio between gross minimum wage and median gross wage	Impact assessment
		Number of employees paid with minimum wage	Impact assessment
		Share of wages in GDP	Impact assessment
		Distribution of employees paid with minimum wage, by gender, age groups, occupation, NACE codes	Impact assessment

	Living standards	In-work poverty	Impact assessment
		Inequality of wages	Impact assessment
		Minimum expenditure basket	Criteria for minimum wage setting
Economic criterion	General level of prices	Consumer Prices Index/ Inflation rate	Criteria for minimum wage setting
	Employment	Employment rate (total, by age groups and gender)	Impact assessment
	Economic development/ productivity	GDP per capita (PPS)	Criteria for minimum wage setting
	Competitiveness	Real effective exchange rate (REER)	Impact assessment
		Unit labour cost	Impact assessment
	Economic activity of enterprises	Turnover, profitability	Impact assessment

Source: authors' own contribution

The time frame for this analysis is 2000-2016, considering that before 2000 the Romanian economic context was exposed to deep economic reforms, with high and fluctuant values of inflation rate and severe structural imbalances. Since 2000, Romania has developed on a more stable economic and social ground, despite the challenges arising from its accession to EU. The proposed scenarios are projected for 1 to 5 years-time period, depending on data (forecasted) availability.

As the gross minimum wage (GMW) was not constant during a calendar year, for the purpose of this analysis, the annual average gross minimum wage was considered. For example, for the first 4 months of 2016 the gross minimum wage was 1050 RON and starting May 1st 2016, its level was set at 1250 RON. Thus, the average value for 2016, used in the analysis, is 1183.33 RON.

One should bear in mind that there may be issues related to data quality, availability, coverage and comparability in time or adequacy to the topic, depending on the initial purpose of the institution gathering a particular indicator. Multiple sources for an indicator may be available, while some others, detailed, devoted to specific aspects could be made available upon request or can simply not be available at all. Changes in methodology could generate breaks or variation in data series. For both minimum wage setting criteria and impact assessment indicators, the present analysis made use of the most complete available time series. The list of indicators used, as well as potential ones is presented in Annex 2a-2b and includes information on availability, coverage, sources and disaggregation level.

3.2 Social criterion - needs of employees and their families

a. The general level of wages

Possible indicators for this category are:

- *The average gross salary or earnings in real terms (adjusted with consumer price index-CPI), at national level and by NACE codes*
- *The ratio between the minimum wage and the average/median wage, at national level and by NACE codes*
- *Number of employees paid with minimum wage, at national level and by NACE codes*
- *Structure of employees paid with the minimum wage, by NACE codes, age groups, gender and occupations.*

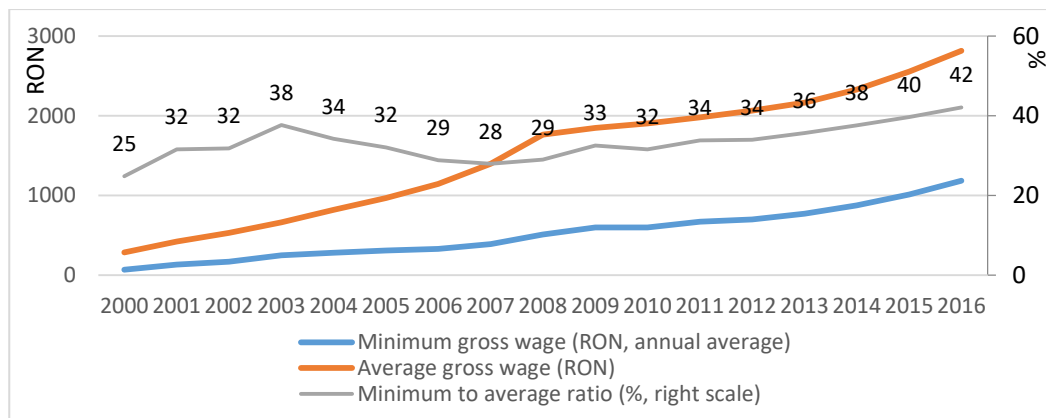
In practice, the general level of wages is often the dominant criterion in the decision of setting the minimum wage. For this reason, a more detailed examination of the available indicators on the level and evolution of wages is the first step in establishing or adjusting the minimum wage. In many countries, the periodic adjustment of the minimum wage is given by the general evolution of salaries (mean or median), aiming, most of the times, a constant ratio between the minimum wage and the average or median. The number of employees who are at the level and around the minimum wage is essential information in order to assess the impact of adjusting the minimum wage on the wage bill.

Data for all of these indicators are available through the surveys of National Institute of Statistics (NIS).

Minimum vs. average wage; the ratio

The evolution of these two indicators is clearly ascendant over the observed period, with no similar rates. Both before and after the economic crisis of 2008, the minimum wage registered a higher increase rate. In real terms, the average gross wage was 1.8 times higher in 2016 than in 2000, while the gross minimum wage was 3.7 times higher. After a significant increase in 2009, minimum wage has progressively recovered the distance to the average wage in the last five years.

Fig. 3.1 Wages dynamics, nominal values



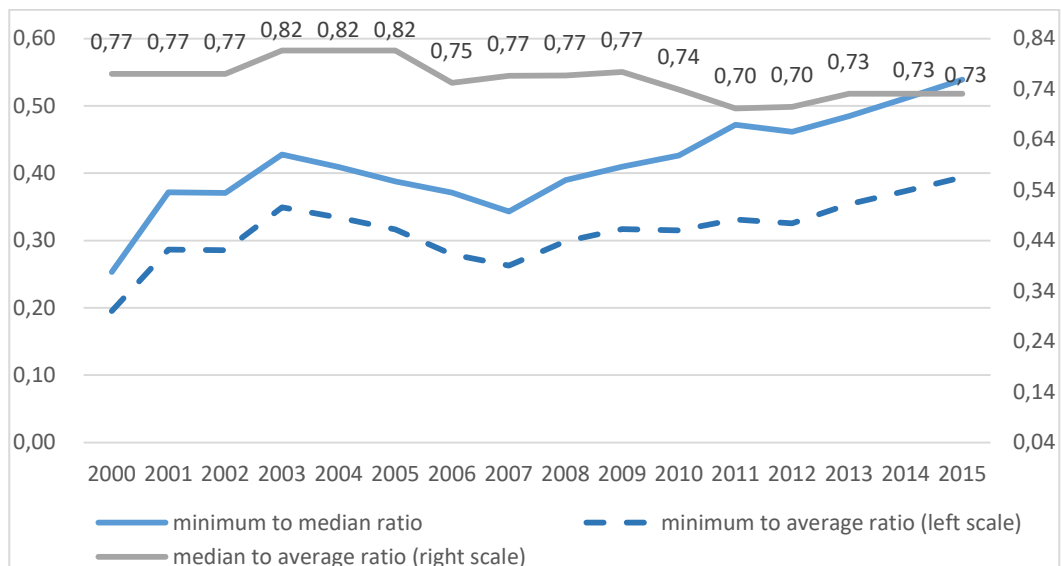
Source: authors' calculations after NIS

The average vs. median wage

Another important relation is between the minimum and the median wage. According to the OECD statistics (Figure 3.2), in Romania, the median wage represented 73% of the average in 2013 and after. This means that the wage distribution has a pronounced left asymmetry, with a high concentration of earners at the bottom half of the wage distribution. Just few countries in the European area (Greece, Portugal, Turkey and Bulgaria among them) have a more pronounced left asymmetry of the wage distribution. The European average ratio (except for the mentioned countries) is about 83%³⁷. Generally, under these circumstances, when a distribution has a high degree of asymmetry, the median is a better indicator of the central trend than the average, which can be influenced by extreme values. Also, when a distribution has a high degree of inequality, then it is more appropriate to use the median as a measure of central tendency.

As the median is not influenced by extreme values, unlike the average, and better expresses the movements on the half of the wage earners primarily exposed to the dynamics of the minimum wage, adjusting the minimum wage should take into account both the average and median values of wages. Unfortunately, data on median values are less often available than on average. For instance, even the observed data used in the figure below refer to the full-time workers and not to the full-time equivalent workers, as the national average value is usually computed. In the case of low incidence of part-time contracts, as it is the case of Romania, the differences can be low, but relevant from the perspective of the mechanism's purpose. Beside this, changes can whenever occur (due to employment policies for youth and other vulnerable groups), thus the difference should be kept in mind.

Fig. 3.2 Average vs. median wage, ratio dynamics (values for full-time workers)



Source: authors' calculations based on OECD.Stat data

³⁷ According to Eurostat, *earn_ses_monthly*; OECD.stat

Due to the existing link between minimum and average wage, paying attention to what happens with the average distribution, we think it is appropriate for the present Romanian context to set a scenario departing from this relationship (Scenario 1). The impact of minimum wage changes on the median wage is relevant from the economic perspective at company level, because a high density of employees at the lower side of the wage distribution is conducive to lack of commitment from workers, non-involvement in professional development and low productivity.

b. The standard of living

The main purpose of the minimum wage is to protect employees having very low salaries, guaranteeing them a basic, but decent living. The minimum wage is expected to influence the poverty rate, but the extension of the effect depends on the poverty profile of social categories and composition of households. Indicators from this category are mostly impact assessment indicators, among which:

- *In-work poverty and at-risk-of-poverty rate*
- *Employees incidence in poor population*
- *Indicators of wage inequality* (Gini index, quintile share ratio)
- *The average wage by deciles*
- *Average household expenditures, by social categories*
- *Minimum expenditure basket*

The data sources for these indicators are household surveys - Household Budget Survey and the EU-SILC Survey (European Union - Survey on Income and Living Conditions), conducted by NIS.

Fig. 3.3 Minimum wage vs. poverty dynamics



Source: authors' calculations based on NIS data (wage); Eurostat, ilc_iw01

Between the gross minimum wage dynamics and that of relative poverty seems to be a positive link, if any (fig. 3.3.). While the incidence of poverty among employees (at the 60% of median disposable equivalent income threshold) varies slowly around 5%, that of the self-employed (mainly) reaches figures over 50%, while the poverty figures for total employment are lying around 18%. Self-employment in Romania has a very particular character, being constituted almost entirely (over 94%) from self-employment without employees, extensively in the rural area in agricultural related occupations. This has been a constant buffer for people losing their jobs or for households with low income. Atomized to households' properties, the activity is not surprisingly low productive and exposed to climate and economic risks, so the poverty incidence is high. This group is not covered by the minimum wage. The analysis on the impact of the (total) in-work poverty keeps the focus on the employment structure and the need for economic development.

With 37.4% of the Romanian population at risk of poverty and social exclusion (Eurostat data, 2015), it is clear that a considerable number of families lack the conditions for a minimum standard of living, being unable to afford an adequate food supply, proper clothing, hygiene and health products, basic services or even shelter. The minimum expenditure basket is a standard below which no person or family should live in order to benefit of a decent living.

One of the proposed scenario (Scenario 4) is built on the value of a normative expenditure basket estimated for a typical Romanian family consisting of two active adults and two children (aged between 2 and 18 years old) (it is also a representative family for minimum wage earners)³⁸. The composition and the cost of the minimum basket have been proposed by the Research Institute for Quality of Life (RIQL), an institution who has been concerned with the development and improvement of a methodology for minimum expenditure basket calculation³⁹ since more than 20 years now.

The basket includes at minimal levels both the resource requirements for current consumption: food, clothing, footwear, housing, services as well as the quantities and purchase prices of goods and services, plus the costs of education and professional training, individual affirmation and the social status (cultural services, postal services and telecommunications) to enable individual development and social participation. The estimations are normative, drawn from expert knowledge about basic requirements for decent living. Family composition, area of residence and the ownership of the dwelling are taken into consideration as well.

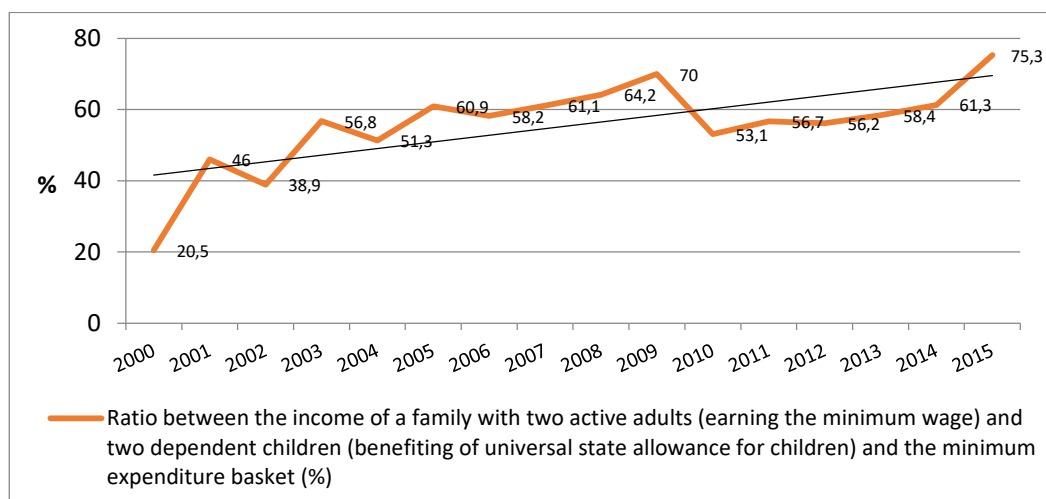
³⁸ Research on the level of the statutory gross minimum wage in Romania, regarding the assessment of the economic and social impact of its enforcement, (Contract no. 41/07.10.2016 signed between the Romanian Ministry of Labour, Family, Social Protection and Elderly - MMFSPV and the National Scientific Research Institute for Labour and Social Protection - INCSMPS), <http://www.mmuncii.ro/j33/index.php/ro/minister/minister-rapoarte-studii>

³⁹ Mihăilescu, A. (2016). Quality of Life in Romanian Households, *British Journal of Applied Science & Technology* 14(6): 1-11

In the next figure (fig. 3.4.), one can see the ratio between the income level of a family with two active adults, employed and payed at the minimum wage level, and two children who benefit of the universal state allowance for children and the minimum expenditure basket estimated for this representative family type. It reveals that in 2015, for example, this ratio was around 75%, which means that with this certain level of income a family could not meet the minimum requirements for a decent living; however, the dynamics of the ratio shows a tendency of slight improvement.

As concerning the minimum expenditure basket calculation methodology, we mention that though complex, it has a certain degree of subjectivism arising from the expert judgement that it draws upon. The estimations are not taking into consideration the effective expenditure choices of the population and, moreover, another limitation concerns the structure of the minimum expenditure basket, which has not been updated for some time. However, in the case of Romania, the dynamics of the cost of a minimum basket could represent a very good tool for designing an alternative scenario on minimum wage setting, provided that it overcomes at least some of its limitations.

Fig. 3.4 Income vs. minimum expenditure basket (ratio)



Source: authors' calculations

In this respect, we propose that an updated methodology of the minimum expenditure basket to be developed, in order to combine normative methods based on expert judgement with inputs from the effective expenditure patterns of the population. The institution that would be most appropriate to have the responsibility of calculating the minimum expenditure basket is the National Institute of Statistics (NIS), which has a considerable expertise in this area, and also collects data on household expenditure on monthly basis through the Household Budget Survey and on prices of goods and services. Moreover, it would assure validity and reliability in this endeavour.

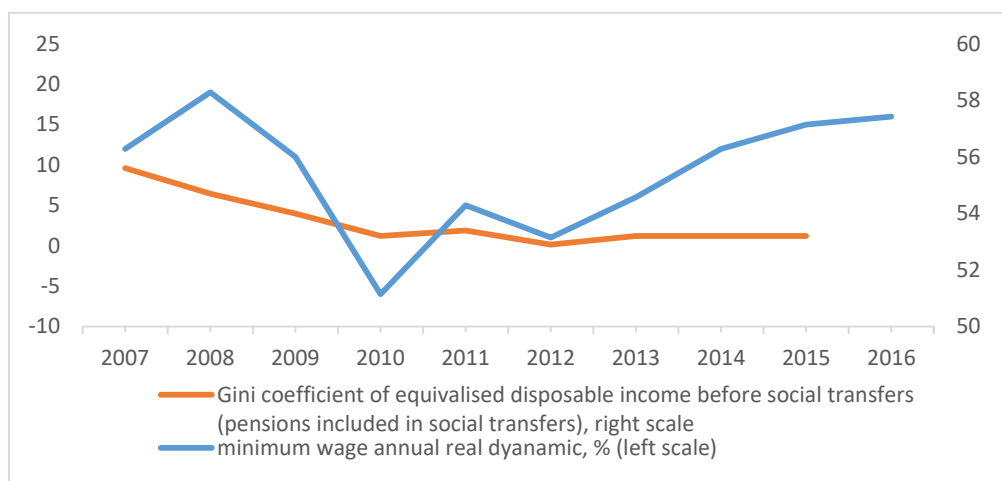
Following the Government Emergency Ordinance no. 217/2000, NIS has estimated on quarterly basis and following a normative method the monthly minimum expenditure basket for a medium sized household (2.804 persons), and the value of the estimated basket was approved for each quarter through Government Decision. This situation has lasted until the second quarter of 2003, when the above mentioned emergency ordinance has been abrogated and the minimum basket estimations devolved on the Ministry of Labour, Social Solidarity and Family. At that time, the minimum basket was regarded by the government and social partners as a very important indicator for minimum wage setting, of wage and social policy in general. Even so, in the years to come, the value of this indicator has not been taken into consideration in the minimum wage setting process.

In conclusion, the minimum expenditure basket as a criterion for minimum wage setting should meet the following conditions:

- The methodology of calculation should be a combination of normative methods with effective expenditure data to establish the structure of the basket.
- Regarding the frequency of calculation, the prices of goods and services shall be adjusted on yearly basis, while the structure should be updated every 4 years or whenever the data drawn from the Household Budget Survey show a considerable change in consumption patterns.
- The institution responsible for its calculation would be the National Institute of Statistics.

The number of low wage earners, paid with wages close to minimum wage (up to 105%) or with wages no greater than 2/3 of the median are important measures for monitoring the share of population which risks of falling into poverty once any unexpected event arises in their personal or family life. Their structure by NACE codes, age or gender, provides valuable inputs for measures to be taken as part of the social and fiscal policies, or social services to be developed.

Fig. 3.5 Minimum wage vs earnings inequality dynamics



Source: authors' calculations based on NIS data (wage); Eurostat, ilc_di12b

The earnings distribution seems to be sensitive to minimum wage dynamics, and its inequality has tended to decrease parallel to the accelerated increase of the ratio between minimum and average wage. Despite this, earnings inequality in Romania is still among the highest in Europe and less tempered by social transfers than most of the European countries, Romania ending in the top 5 countries by overall inequality⁴⁰. This justifies the attention given on income and earnings inequality in analysing minimum wage increase impact.

As, the time series is short, this is one of the results that needs to be treated with caution. Limits with respect to the estimation of the number of low paid employees arise from under-declared/envelop payment of the workers, and also from undeclared work. Some alternative data sources can be considered, but each of them has its own limits. It is the case of the Labour Force Survey vs. the Survey on Labour Cost or the Structure of Earnings Survey, which relies on individual or company level; the difference in results is difficult to fully explain and consider in a projective analysis. Data availability for adequate length of time series in order to express detailed relationships between indicators is another major limitation. Implementing such a minimum wage adjusting mechanism would help at better understanding the specific dynamics of social indicators in Romania.

3.3. The economic criterion

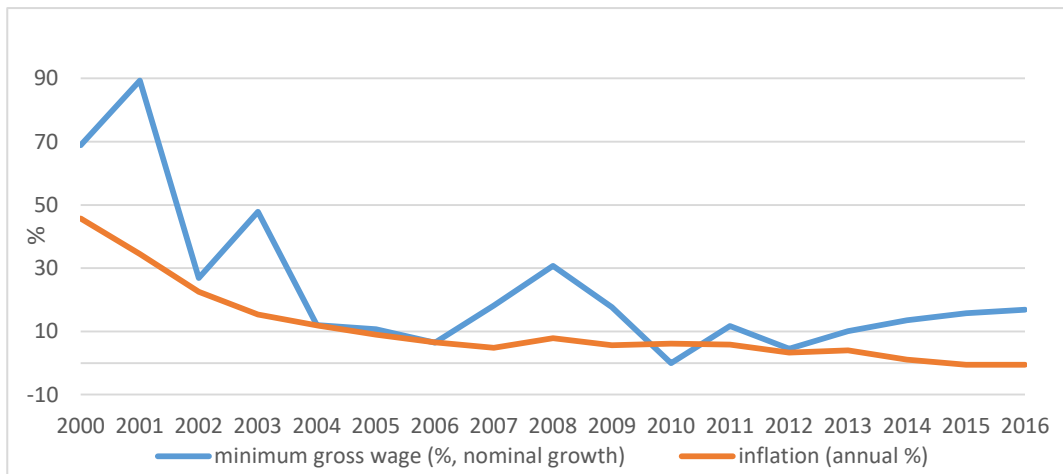
The economic perspective on minimum wage arises from the labour costs entailed by its increase. It directly impacts the companies and the state as employer, as well as the macroeconomic equilibrium throughout its spread or indirect effects on companies' economic performance and individuals' propensity of consumption. Inflation, employment and resources for supporting the additional costs (economic capacity) are perspectives we put the minimum wage in relation with.

a. The general level of prices

Inflation is a widely used criterion for minimum wage adjustment, although the relationship between the minimum wage and inflation is far from simple. While, on the one hand, indeed, increasing the minimum wage with the inflation rate protects the purchasing power of vulnerable employees, the approach is likely to accelerate the inflationary spiral affecting the cost of labour and putting pressure on aggregate demand.

⁴⁰ Source: Eurostat, ilc_di12b, ilc_di12.

Fig. 3.6 Evolution of the inflation rate and nominal minimum wage growth



Source: authors' computation based on NIS data

To avoid this, some countries adjust the minimum wage in line with the expected inflation rate, not to that observed in the previous year for not transferring the inflation rate from one year to another. Others set the growth of the minimum wage to the previous inflation rate. We have treated inflation both as criteria indicator for minimum wage setting (Scenario 3), but as well as impact assessment indicator for minimum wage increase.

In figure 3.6, we note that there is a clear correlation between the inflation rate and the nominal growth of the minimum wage.

b. Employment

The link between minimum wages and **employment** is the issue mostly studied when discussing minimum wage impact. As it is an impact indicator, the increase in minimum wage is expected to affect negatively the level of contracted employment, as a strategy of employers to keep control on wage related costs. The relationship was controversial in recent times; studies on particular economic sectors have not revealed the existence of the relationship. Typically, the minimum wage level is more connected to youth unemployment, employers are not willing to pay more (or the same as for a person with work experience) for young employees. A recent study on Romania has revealed that both male and female employed population is expected to be affected by minimum wage increase, as well as the population between 35 and 44 years old⁴¹. As mentioned before, a notable increase

⁴¹ Research on the level of the statutory gross minimum wage in Romania, regarding the assessment of the economic and social impact of its enforcement, (Contract no. 41/07.10.2016 signed between the Romanian Ministry of Labour, Family, Social Protection and Elderly - MMFPSPV and the National Scientific Research Institute for Labour and Social Protection - INCSMPS), <http://www.mmuncii.ro/j33/index.php/ro/minister/minister-rapoarte-studii>

in the minimum wage could lead to undeclared work increase, so that could change the employment structure.

Indicators monitoring employment could be the following:

- Employment level/ rate by NACE, age group, gender, type of employment
- Contracted employment at aggregate level, but as well by NACE and age groups
- Costs of employment support schemes, particularly for youth

During the economic crisis, the slope of total employment decrease is less steep than of the wage (contracted) employment, while at the beginning of the economic re-launch, in early 2000, the last one increased systematically; self-employment has played a buffer role for population in economic constrained time. This brings into attention the employment structure and the migration opportunities of young people especially, which emphasize the influence that context plays on the indicators' tendency. The wage employment seems more clearly linked to minimum wage variations. Another observation is related to youth employment, sensitive to minimum wage dynamics up to 24 years of age, but clearly influenced by other factors.

When working with indicators expressing the full-time equivalent it is not worth monitoring the part-time or temporary employment, but they gain significance from the social policies point of view. These non-standard types of employment make youth entrance on the labour market smoother. The risk of remaining trapped in such forms is diminished by linking them strongly to education participation, which would be in the benefit of individuals, employers and finally of the state, due to higher employment rates. This is why employment rates by age groups are of primary importance, each having its own significance. Between 15-19 years of age, traditionally, there is a low interest of youth (and their parents) in labour market entrance, still valid in the case of school-leaving. In this last case, occasional high profitable jobs/ activities are envisaged. The 20-24 years group is still mainly to be found in tertiary education, but it is also the period of entering labour market for many young people (high school graduates or those looking for supplementary income in non-standard forms of employment). The consolidated employment of youth is better expressed by the age group of 25-29 years. Various employment supporting schemes could enhance youth employment and hide the impact of minimum wage. This is why the classic indicators of employment should be complemented with governmental expenditures on employment support (apprenticeship, training, for youth or vulnerable employment), and the way these are shared with the employers.