## The work seeking motivation - where it comes from? A study based on the Polish case

In economies under transformation, an increase in unemployment rates is not a surprising development. However, data show that in Poland this increase has recently reached alarming levels. In 1998, eight years after the transformation process had begun in Poland, the unemployment rate exceeded 16% or even 30% in the northern regions of the country. Since then the unemployment has become not only an important economical but also social problem. As the overall unemployment level is still increasing, reaching the level of 20% in 2002, policies that would effectively combat the phenomenon are now urgently needed.

The permanent and worsening unemployment situation that developed during the past decade suggests that possibly some of the applied anti-unemployment policies have not been as effective as it was hoped for. In this paper we focus our attention on one policy tool, namely, an unemployment benefit system. We explore in what way the benefit system have been applied in Poland, and how this tool is likely to impact the unemployment situation. In particular, we try to examine what behavior patterns the different types of benefit systems are likely to elicit among unemployed.

We narrow our analysis to the case of so-called voluntary unemployment. The scale of voluntary unemployment diminishes the effect of undertaken labor market programs and economy transition. Considerable voluntary unemployment causes stagnation in the unemployment reduction. In such case when combating the unemployment, one needs to deal with a third factor, beyond the cyclical and structural factors, that creates the unemployment. The neutralization of this factor requires a significant change in the usual labor policy toolset applied to combat the unemployment.

In the paper we examine in detail the potential influence of benefit system on unemployment, especially in the period of 1998-2001. For this purpose we take into account the difference between unemployment benefit and the level of minimum wage. We assume that both decisions about undertaking work as well as the intensity of the work seeking efforts are directly related to basic economic calculation of profitability, based on individuals' valuation of work and free time. Thus, the level of benefit should influence the degree to which unemployment is reduced.

The work seeking motivation determinates behavior of the system tracking the unemployment level. The motivation originates from the consumption needs regulated (and constrained) by personal income levels. In case of unemployed, one more factor is important: namely "work dissatisfaction", measured as alternative cost of labor, equal to the unemployment benefit. The difference between satisfaction of individual needs through unemployment benefit and satisfaction of these needs through work impacts the unemployment reduction and the simultaneous increase in the employment.

Using the system dynamics (currently under development) we will demonstrate how changes in unemployment level are impacted by a work seeking motivational factor defined as minimum wage/unemployment benefit ratio. This implies that the motivation depends on the relative difference between income received during the unemployment and an income that could be achieved in case of employment during the same time. This possible income may be defined as the minimum wage. However, it is well known that the minimum wage regulated

by the legal system is only an indicator of the actual minimum wage in economy. In practice the wages are far more differentiated. We will define the motivational factor as depending on:

- 1. level of probable wage,
- 2. level of preferred wage.

In the time period under analysis, the rate of wage increase was falling. Simultaneously, the inflation rate dropped quickly and unexpectedly, while effectiveness increased insufficiently. At the same time, the level of possible wage decreased because of the growing unemployment, while the level of preferred wage identified by the personal monthly expenses remained constant.

In the paper we examine several scenarios based on the actual data indicating number of workplaces on the market, population size, and unemployment benefit and monthly expenses indicators. We will run three scenarios for different levels of wage levels that may be obtained on the market:

- 1. 760 PLN=168 USD; wage level equal to the minimum wage level,
- 2. 400 PLN=90 USD; wage level lower than minimum wage,
- 3. 1000 PLN=220 USD; wage level higher than minimum wage.

The first scenario is based on the wage level regulated by the legal system. The second scenario is far more realistic for the Polish economy: It assumes the average the level of wage attainable for unemployed as lower than the prescribed minimum wage. The third scenario explores how the unemployment level would change when the minimum wage attainable on the labor market would equal to the preferred wage level, higher than the prescribed minimum wage level. In the third scenario we expect that the work seeking efforts will be very intensive, but the number of vacancies will limit decrease of the overall unemployment.

In our study of the voluntary unemployment issues and sensitivity of this group of people in the relation to the wage/benefit ratio we consider the attitude of people statistically classified as long time unemployed, passive workers and discouraged.<sup>1</sup>.

The statistical data, on which we base our analyses, show the aggregated number of people, but do not consider the period of benefit receiving and period of work seeking by passive workers. Thus we are not able to examine the problem in a more detailed manner. Simultaneously the study based on aggregated data ensures that various regional and local peculiarities are eliminated from the data set.

We plan to structure our paper as follows: First, we characterize the Polish labor market in period of 1998-2001. In this part we explain the most important factors, which influenced the market and led to such an alarming unemployment situation. In the next part we consider determinants of changes in composition of the unemployment' structure. Some of them are responsible for existence of voluntary employment. We divide them into two groups:

- 1. State influence factors, especially social aid tools,
- 2. Human capital related factors, such as education level, mobility.

<sup>&</sup>lt;sup>1</sup> Passive workforce and discouraged are people 15 or more years old. Due to criteria applied for classification of statistical data, they are not included as employed and unemployed.

Next we will present in detail the model and scenario simulation results. Using the model and the defined scenarios, we will try to define hypothetical scale of wage influence on unemployment decrease.

Our investigation, supported by the simulation results, illustrates the difficult situation on the Polish labor market. The fact that the difficult situation results primarily from a low market price of human labor is especially troublesome. In such case, effectiveness of social programs is likely to be relatively low. The permanent, voluntary unemployment will exist as long as number of vacancies is very low. But despite the high unemployment, a number of employment offers are rejected because of too low wage. The mismatch between the employment offer and wage expectations will continue to reinforce the voluntary employment as long as the unemployed will reduce their expenses, or supplement their income from other sources, such as social benefits or gray area employment.

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