MODEL OF AND PROGNOSIS ABOUT THE PERMANENT POPULATION AND WORKFORCE OF THE COUNTRY AND OF PLOVDIV DISTRICT DURING THE PERIOD 1991 – 2025

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SUMMARY

The goal of this research is the development of an approach for measurement and prognosis of the permanent population and workforce, which shall be used as basis for dynamic five-year series based on the variable age-and-gender structure (including the external and internal net migration during the basic and forecasted period 1991 – 2025) in the country and in Plovdiv District.

The main thesis of this PhD research is that the permanent population and workforce of the country and of Plovdiv District will constantly decrease during the forecasted period. As a result of the long-term low birth rates of the Bulgarian population, high emigration rate of the young people, and the formed steady trend of ageing of the population and relatively high death rate. The differences between the three variants of the prognosis reflect the main hypotheses about the future development of the death rate and the intensity of the external migration, per gender and age, for the forecasted period 2011 – 2025.

The results of the survey lead to several **main conclusions**.

First, a more precise measurement of the permanent population is achieved with the suggested approach (model for prognosis of the population of the country, taking into account the external net migration). Dynamic series per gender and age are formulated, which give an idea about the external net migration of the country during the years of intense historical emigration of the Bulgarian population in the conditions of lack of annual statistical reports. The developed data possess scientific and administrative significance.

Secondly, thanks to the formulated matrix model for analysis and prognosis of the permanent resident population in the country and in Plovdiv District, including the external net migration, we obtain more valid and precise results. In this way, we achieve full link of the permanent population in the beginning and in the end of each five-year period with the live births, deaths, internal and external migration, per gender and age.

Third, on the grounds of the existing statistical information we formulated the only possible prognosis about the relative shares of the current workforce compared to the

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population, per gender and age. There is only one variant due to the big variation of the workforce, based on its representative survey per gender and age. On the grounds of this prognosis and the three prognoses about the permanent population we made a final prognosis about the absolute number of the workforce, per gender and age, for the country and the district, again in three variants. The realistic and optimistic variant of the prognosis about the permanent population provide reasons also for expected more favorable prognoses about the workforce. Or, in a summarized way, in case of limited or variable data about the indicators for the past periods, it is recommended to apply the method of the expert evaluations in order to forecast the indicators, as in some cases, it is the only possible applicable method.

Fourth, the obtained results of the long-term prognosis about the permanent population and workforce during the period 2011-2025 confirm the thesis that the constant population and workforce in the country and in Plovdiv District will decrease. This is related to the low birth rates of the Bulgarian population, high emigration rates of young people and the formed steady trend of ageing of the population. The results from the survey show that the probability of this thesis to be confirmed, for the entire forecasted period, all other conditions being equal, is that our country is one of the countries in Europe and in the world where the rates of decrease of the permanent population and workforce are particularly high. Together with this, the paper points out the favorable conditions necessary for gradual slowing of the external net migration and for the demographic stabilization of the country over the long term.