

Supervisor's assessment of the diploma thesis of Marlen Sikhayev
Forecast of the pre-school education needs in Astana until 2030

The diploma thesis of Marlen Sikhayev „Forecast of the pre-school education needs in Astana until 2030“ consists of 111 numerated pages including 12 pages of appendixes. Its text is divided into nine parts including the introduction and conclusion. In addition there are the lists of abbreviations, tables and figures, plus references and appendixes attached to the main body of the thesis.

The text has standard structure. Its division into chapters and sub-chapters is logical and does not demonstrate any external deficiencies. In the introductory part of thesis the author specifies a wider context in which development of the studied problem - the pre-school development needs - is addressed. However, already there I have found the first rather problematic statement - author's explanation of rapid growth and currently high level of natality in Astana as it is provided on the page 12. Two pages further, formulating his research aims, the author made an unsuccessful attempt to present sophisticated text when he has written on page 14 (subchapter 1.2, the 1st paragraph) the following: "The aim of this thesis is broad and narrow at the same time. In the narrow sense, the research goal is to provide analysis of the future preschool needs in Astana until 2030 using the forecast for interested audience, and at the same time the broader goal is to present the picture of how the trends are developing and how they will be affected in the future.". Unclear formulations like that appear repeatedly in the submitted text.

The chapter two has two parts. The first one, an overview of used literature is, however, not complete. There are mentioned only five publications. Above it, one of them is probably generated by a misprint in the year of publication since only Kaldybayeva (2000), and not Kaldybayeva (2010) can be found listed under References. In the second part of this chapter it could be uneasy to check the facts and arguments on data quality and availability used in discussion since the author is not properly quoting applied sources (twice in the last paragraph on page 18 and several times on the following page 19).

Chapter three is also divided into two subchapters. The first one, devoted to the basic theories related to the studied problem, is fortunately much better elaborated than the preceding texts. Maybe only more explicit tie of discussed theoretical concepts to reality of Kazakhstan and the studied questions could be required from the author and his text. The second part is focused on research questions to be answered in the following text and corresponding hypotheses. It represents a more extensive text than it is required in general on this level of graduation thesis. Nevertheless, the text is not as compact as it should be. There are specified four research questions or their batteries and four hypotheses or their batteries. The problem is that only two hypotheses or their batteries are related to the specified research questions and two remains "in the air" without connection to the specified questions. As a result, there are two questions (concretely the first ones) not implying explicit research hypotheses. Moreover some hypotheses are very discussable, e.g. author's assertions that "... *the process of aging of population will dramatically change the size and structure of future population.*" (p. 25) or that "*The future preschool education needs will decrease as a consequence of gradually changes in fertility and mortality trends.*" (p. 26).

Chapter four of the thesis is devoted to methodology. The first question the reader of this part is posing himself or herself is why there are two basic subchapters, one devoted to general forecasting methodology and the second one to population forecasting methodology when all methodological remarks in the first sub-chapter are concerning exclusively population forecasts.

The labels of the sub-chapters 4.2.2-4.2.4 are not complete, the term "*fertility (mortality or migration) methods*" without further specification does not mean anything. On the other hand, without reference to these two shortcomings and some ineptitudes in formulations, the methodological part of the submitted thesis is relatively well elaborated.

The core part of the diploma thesis starts by the Chapter five on page 36. This chapter provides a comprehensive insight to the acute problem of growing shortage of places (seats) in pre-school education facilities in Kazakhstan and Astana in particular, caused by drastic reduction of their number in the past and recent increase of natality in both territorial frameworks. Its text is also well elaborated, except several usual ineptitudes in formulations and formal deficiencies.

In the middle of its work (p. 47) the author moves to the theme of recent population development which has caused recently increasing demand for pre-school education capacities. First he describes total population growth and basic structural changes to move subsequently to analysis and forecasting of particular components of population change. This part of the thesis is relatively well elaborated, the forecasted values of TFR as well as ASFRs can be labeled as realistic, following the observed trends and respecting reproduction values and specificities of the Kazakh ethnic group representing the principal part of Astana population. Marlen Sikhayev has shown a sense for reality understanding current concentration of births and growth of TFR caused by favorable conditions for reproduction as well as the fact it has to be replaced by decline of the overall fertility in future years likely followed by its further but only partial rehabilitation in the horizon of the year 2030. In the passages devoted to mortality the author describes and analyzes recent radical changes of overall mortality observed in Astana. There are, however, some unclear conclusions regarding its relative change on p. 62, in the comments to the table 14. Moreover, specification that the CDR values are standardized is missing in the legend of the table. Author's assumptions as expressed on the level of selected aggregate indicators are logical and well justifiable. In the chapter 6.3 dealing with migration he relatively well presents analytical results, meanwhile the forecasting part is practically fully missing. Very basic forecasting information on overall migration appears only in the sub-chapter 6.4 where the overview of all future scenarios is presented.

Chapter seven contains results of the population forecast for Astana until the year 2030. Their presentation has a standard content and format, and covers overall population size and entire sex and age structure. Following the intentions and aims of the author and his work, it should be an overture to the main part of the thesis - forecast estimations of the pre-school education needs. Nevertheless, due to a limited scope of the Chapter eight, the gravity point of the entire work seems to be in the general population forecast and its results themselves. I do not see the problem in the fact that demand is not calculated on the beginning of September when oldest generation of pre-school age children are moving to schools and new, youngest one is entering the scene, as in the fact that demand is understood in its absolute sense, i.e. that all parents are in need or interested in pre-school education in pre-school institutions. This simplification was already established in the analytical part, moreover, maybe not fully under the auspices of the author, but it cannot be an excuse. The author had at least to point this specific feature out and take a relevant stand on it.

Concerning the conclusion, it should be clear to any reader that this thesis is primarily about pre-school education needs as announced by the title of entire work but about population forecast of Astana population as such. However, frankly, there is no real forecast of pre-school education needs in the thesis but only a part of the population forecast merely cut out from the general one. At the same time, there is also no forecast of real pre-school education supply as announced in the subchapter 1.2. Since there are no such forecasts, there cannot be formulated any recommendation as announced at the same place. In brief, the submitted diploma thesis is

presenting as an original work "only" quite well elaborated population forecast of Astana until the year 2030, nothing less but also nothing more.

The submitted thesis is also not free of formal deficiencies. For instance, the following shortcomings of this nature could be mentioned:

- 1) Regardless the author has obtained the guidelines (Rules for formatting university graduation theses) at least three times (last time on October 30, 2012), he did not correctly refer to the used literature - (1) "institutional" texts are quoted under the institution and its abbreviated name (not like on pages 12, 13 ...), (2) when the same author or group of authors is publishing two or more texts during one year, they have to be distinguished by letter added to the year of publication (not like in the case of work of Centr ustojchivogo ... see p. 94)
- 2) He has a problem with writing small and capital letters in English names of institutions - all initial letters should be the capital ones.
- 3) Fig. 7 on p. 41: The regions should be ordered by the intensity of the phenomenon displayed.
- 4) Tab. 2 on p. 43: Millions or thousands of KZT?
- 5) Fig. 11 on p. 43: Incorrect description of the axis y
- 6) Tab. 4 on p. 49: Errors in the title and head of the table, plus incorrect design of the head (the order of columns)
- 7) Tab. 11 on p. 55: To what variable are the development indexes related?
- 8) Fig. 24 on p. 64: Missing units of measurement
- 9) Last par. on p. 87: "Qualitative services" does not mean the same as "quality services" mean.

Regardless all critical notes addressed to the author and his work I have no doubt that the forecast as it is elaborated and presented here could become a subject of standard diploma thesis from Demography. As such I would, of course, evaluated it much higher than in the current context since the fulfillment of research assignment and aims is also a part of the diploma thesis evaluation.

In sum, taking into account the main purpose of a diploma thesis and weighting all positive and negative features of the thesis "Forecast of the pre-school education needs in Astana until 2030" submitted by Marlen Sikhayev, I recommend to the Commission for state examinations to accept it for defense. At the same time, I propose to assess this work by the grade "good".

Prague, 16th December 2012



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