

Opponent review of Master Thesis:

**Naila Mukhtarova:**

### **Brain drain of Kazakhstan in 1999-2008**

Analysis of migration of highly skilled people in Kazakhstan is relevant topic as it is one of the important elements of migratory process and thus has an impact on population development. Studies of this type are rather rare. Intellectual emigration from Kazakhstan has become a serious problem after the collapse of the USSR. The aim of the submitted work was to evaluate the main trends in brain drain and find out to which extent has the recent social and economic development in Kazakhstan influenced the brain drain process. In the "Introduction" the object and subject of the study are specified as well as several research questions are posed. However, not all promising objectives were fulfilled. Author stressed the complicated situation regarding economy and labour market when assessing the current and future prospects.

The submitted work has a logical structure to cover the phenomenon under study from broader perspective. It includes information about relevant literature and available data sources in the chapter 2. However, the methodological chapter is not sufficiently elaborated. There is no uniform marking. Only one formula of emigration rate by skill levels is presented on the page 27 and it is not understandable. In the chapter 3 within the theoretical background the basic terminology is explained and the brain drain phenomenon is described from historical perspective. Furthermore, the general information on brain drain around the world is presented. The chapter 4 gives the overview of the migration trends and analysis of brain drain in Kazakhstan. The educational system in Kazakhstan is explained together with recent improvements and introduction of "Bolashak" scholarship. Analysis of the intellectual migration flows is based on "highly skilled emigration rate". Is this indicator really calculated according to formula on the page 27? Trends of the emigration by occupation are analysed and special attention is given to "Oralmans". Finally net migration is taken into account.

Even though the submitted work has sufficient extent, it is largely only descriptive, the main results are rather vague and superficial. Sometimes there is no clear linkage between theory, data and research findings.

#### **Other comments:**

1. The work often missed the formal accuracy, for example in the Table 2 (page 26) it is not clear what are the results. What does it mean the t-ratios?
2. Most of the tables and figures suffered by imperfections:
  - a. Table 11 (page 49) – are the numbers the row percentages?
  - b. Table 12 (page 50) – are the number really the percentages? There are no references in the text to this table.
  - c. Figure 6 (page 52) – "kazakhs" and "russians"
  - d. Figure 32 (page 82) – the title should be "Crude net migration rate by gender in urban area" instead of "Crude net migration rate by urban area"
3. In the table 3 (page 30) it is not clear which part belongs to the year 1990 and which to 2000. On the page 29 the last sentence refers to the table 3, but to what numbers?
4. In the text there are some unclear expressions, for example: "The trend of net migration of educated people shows negative value of highly skilled migrants." (page 88).
5. There are also grammatical mistakes like "As is known....." (page 88).
6. etc.

It was given little attention to the language correction although it has good level of technical processing. Nevertheless, in my view the submitted work meets the basic criteria for master thesis in demography. I recommend this work to be defended.