

Demographic losses of the Far East: assessment of economic damage

Anna V. Belousova¹, **Mariya A. Gritsko**²

^{1,2} The Economic Research Institute FEB RAS, Khabarovsk, Russia

¹ belousova@ecrin.ru, <https://orcid.org/0000-0002-8780-8146>

² gritsko@ecrin.ru, <https://orcid.org/0000-0001-7853-0413>

Abstract. *The article presents estimates of the potential damage from demographic losses as a result of mortality and population migration for the economy of the Far Eastern Federal District as a whole and its constituent entities of the Russian Federation. The “retiring” population was considered as a producer of regional supply (production factor) and a producer of regional demand (consumer of final products). Using econometric analysis of the linearized Cobb-Douglas function, built on the basis of a panel data structure, a quantitative analysis of the decline in GRP with a reduction in the number of employed population aged 15–72 years was carried out for the period 2017–2021. Less sensitive to population mortality were resource regions whose specialized types of economic activity are characterized by relatively high capital intensity (the Republic of Sakha (Yakutia), the Kamchatka territory, the Magadan and Sakhalin regions, the Chukotka autonomous region). Losses in regional production due to the population loss as a result of migration exceeded losses from mortality in the all Far-Eastern regions. The highest potential economic damage was received in the Republic of Buryatia, the Trans-Baikal, Primorskiy and Khabarovsk territories, and the Jewish autonomous region. Using the method of commodity balances, taking into account the counter trade flows by T. Cronenberg and its subsequent hybridization, estimates of decrease in the regional output by the age groups of population for 2019 and 2020 were obtained. The main contribution to the total loss of regional output was made by the population over working age (in case of mortality) and the able-bodied (in case of migration).*

Keywords: *mortality rate, migration, economic dynamics, economically active population, production function, regionalization of input-output tables, the Far-Eastern federal district, subjects of the Russian Federation*

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