Covid-19 influence on regional economy modeling *

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Abstract. The article is devoted to the Covid-19 influence on the regional economy modeling on the example of Novosibirsk oblast. The following model is based on the input-output balance modeling of the region given the effect of shocks on individual industries. To model regional input-output flows the localisation model is used. It allows for construction of input-output tables using regional data on the number of workers in the area and national input-output tables. Covid-19 is modeled as a shock source for industries. Its influence is evaluated using two approaches. The first one uses regional labour figure dynamics to see how decease-related mortality affected the industries involved. The second model is based on localised change in national gross domestic product. The results of shock influence in both cases is compared.

Keywords: input-output tables \cdot localisation coefficients \cdot Covid-19 macroeconomic shocks.

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