
Original article

Models of vector autoregression in forecasting inflationary processes at the regional level (using the example of the Jewish Autonomous Region)

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Abstract. *The paper presents the stages of constructing a vector autoregression model (VAR model) for forecasting inflation at the regional level, and a short-term inflation forecast for the Jewish Autonomous Region. For this purpose, a selection of possible indicators for the VAR model has been singled out, and the need for their use has been economically justified. It has also been proved that it is necessary to use fictitious variables to eliminate the influence of identified shocks in the dynamics of inflation. The resulting VAR model has been recognized as sound after conducting the necessary econometric tests. The model has been verified. It is worth noting that the developed VAR model is suitable only for the study of the selected subject of the Russian Federation, since each region of Russia has its own uniqueness. The selection of indicators should be singled out individually for each territory. At the same time, the algorithm for constructing a forecasting model is universal and can be applied to various territories. It has been concluded that it is important to build an inflation forecast, since its impact must be taken into account in financial planning by absolutely all economic agents at all hierarchical levels: government, business, and the public. The views expressed herein are solely those of the authors. The content and results of this research should not be considered or referred to in any publications as the Bank of Russia's official position, official policy, or decisions. Any errors in this document are the responsibility of the authors. All rights reserved. Reproduction is prohibited without the authors' consent.²*

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