

Asian Social Science 2014 vol.10 N24, pages 120-126

Prediction of engineering development based on institutional approach

Palei T.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2014, Canadian Center of Science and Education. All rights reserved. The expedience of forecasting the engineering industry development, based on the institutional approach is substantiated, trends, challenges and risks of engineering industry in Russia, including "institutional trap" identified in the article. Engineering industry development scenarios in Russia based on the author's model are considered for the period until 2018. As a tool for building the predictive model the method of correlated-regression analysis is used, as it allows to determine the kind of mathematical functions causation, synthesize diversity of variables in the model and simulate their behavior. The model allows determining the optimal structure and the volume of labor and capital in the future to ensure the growth of sales of engineering products of each species in the national and global market, as well as mechanisms of fiscal and trade policies that maximize the value of sales volumes of engineering industry in Russia.

<http://dx.doi.org/10.5539/ass.v10n24p120>

Keywords

Engineering, Forecasting, Industry development, Institutional approach, Model building