	Коэффициенты	Стандартная ошибка	t-статистика	Р-Значение	Нижние 95%	Верхние 95%
Y-пересечение	113,700	51,391	2,212	0,062	-7,821	235,222
X1	1,581	0,104	15,112	1,34E-06	1,333	1,828
X2	-1,575	0,522	-3,015	0,019	-2,810	-0,340
X3	-0,154	0,129	-1,198	0,269	-0,459	0,150

Полученное значение коэффициента детерминации, F-критерия Фишера, сравнительный анализ значений коэффициентов регрессии и стандартных ошибок и значения t-критерия Стьюдента показывает, что полученная зависимость является статистически значимой.

В результате проведенного корреляционно-регрессионного анализа получена следующая зависимость физического объёма внутреннего валового продукта России:

$Y = 113{,}7 + 1{,}581 \times X1 - 1{,}575 \times X2 - 0{,}154 \times X3$

Y – физический объем ВВП;

X1 – индекс производительности труда;

X2 – индекс физического объема инвестиций в основной капитал;

X3 – индекс численности экономически активного населения.

Данная функция дает возможность прогнозировать величину экономических показателей в будущее, а также управлять ими. Представленную модель необходимо развивать и дальше, так как могут существовать другие неучтенные авторами факторы, влияющие на результирующий признак.

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COMPUTER SIMULATION METHODS IN FOREIGN POLICY

N.E.Rozhkova

(*Tomsk, Tomsk Polytechnic University*)

Such sphere of policy as international relations needs to develop methods of analysis for more effective prediction. This article presents different methods of forecasting which is based on computer modeling and explains the main principles and ideas of these techniques.

Key words: computer modeling, computer simulation, international relations, forecasting, dynamic modeling

The new realities and unbalanced relations between states called for the developing of prediction in foreign policy. Today the task of such development is possible to resolve by Computer Science.

From the viewpoint of informatics any task whether it is industrial or scientific can be described by the following sequence as "real object – model – algorithm – program – results – real object". And in this chain such element as "model" has a major role. So, foremost for the geopolitical problem is necessary to create accurate and correct model for future analysis and forecasts. Computer modeling makes large data arrays and the number of researched parameters possible to process, i.e. allows making more effective empirical data processing (due to the large amount of information which characterizes the political model of relations this method appears impossible for not automated using). Furthermore, because of computer simulation of geopolitical processes we can observe visually imperfection of empirical analysis, specifically problems with untapped information and controversial results between the combinations of quantitative and qualitative indicators and experience real interdisciplinary integration.

For making a more accurate prediction computer simulation should reject a static model in favor of a dynamic one. Computer dynamic modeling includes concepts, categories, indicators, variables describing the behavior of the object and can vary with time. It means that modeling allows to make perturbation and to determine likely consequences: "What will happen if this side does so? Or "What will happen due to this event?" Changing certain parameters we create different scenarios for the development of foreign policy relations. The ability to look at the possible outcome of events prevents from thoughtless actions in the decision-making in geopolitics. And the second and not less important reason to use computer modeling is the lack of subjectivity in foreign policy issues, because a computer system relies on specific parameters without conforming them to any political direction and corresponds to the majority. Probably, this leads to the reduction of the political part to control social processes and displacement problems in the field of conflict associated with clarifying the relationship in occasion political power. Dynamic modeling includes developments from separate spheres of prognostics and modeling such as econometric model of national economics, operations research, game simulation and artificial intelligence, models of the arms race, simulation games and system analysis.

Computer simulation has several analytical tools for the creation of such models. Primarily, it is the usage of physical models, which lead to the solution of systems of differential equations. On a global scale and with enormous temporal and spatial scopes using computer modeling is the only possible solution for the forecast preparation. However, to provide successful prediction the system needs the diagnosis of the current situation. To solve this problem computer modeling uses a regression model. This method explores the influence of independent variables on the dependent ones, i.e. the system gets the task to process the large amount of statistical information and identifies the connections between variables. Regression analysis can predict the dependent variable, but this dependence reflects only the mathematical relationship. So this method is not useful if we need to determine causal relationships. In this method they are identified by default. For calculation system uses common linear econometric model with continuous variables. In other cases dependent variable can be integer or dummy variable which takes a binary value.

But the regression model is not suitable for solving the problem of ranking states, because some factors which characterize them are carefully hidden (for example factors related to military-industrial complex). These factors are accepted for some unknown variables and we can surmise their values on the basis of available information. For solving the tasks which cannot be solved with the help of regression method we can apply a Hidden Markov model (HMM). This model is the chain (the sequence of random variables, where each value x_{i+1} depends only on the previous x_i which, in its turn, is conventionally independent of the previous x_{i-k}), which allows to observe the hidden states. However, we can

see only observed y_i which depend on current state. For implementing the method system there should be used the Markov Chain Monte Carlo (MCMC) algorithm which enables to realize the particular outcome using a random number generation.

If we need to predict the events outcome based on the known sequences, the system has the task to identify the reference sequence and to predict further outcome of political events on the basis of information received. This algorithm is known as the precedent-based reasoning and is often used in international relationships.

For the simulation of solving specific situations the computer modeling applies game theory. Game theory methods calculate all possible scenarios and are unable to find the most optimal solution.

Computer modeling of foreign policy is a powerful and modern instrument for analyzing and predicting international relations. There are different techniques, which allow influencing the quality, strategy and truthfulness of prediction. Integration of analysis and probabilistic approach in forecast together with computer modeling increases these characteristics. The lack of stability in the global arena is forcing us to consider the transition to objective assessments on the existing situation without subjective view.

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НЕОБХОДИМОСТЬ АКТУАЛИЗАЦИИ АНТИКОРРУПЦИОННОЙ СТРАТЕГИИ ПОСРЕДСТВОМ КОНЦЕПЦИИ «ЭЛЕКТРОННОЕ ПРАВИТЕЛЬСТВО»

Кропова А. А. , Хаперская А. В.
(г. Томск, Томский политехнический университет)

THE NEED TO UPDATE THE ANTI-CORRUPTION STRATEGY DUE TO THE "ELECTRONIC GOVERNMENT" CONCEPT

Kropova A.A. Khaperskaya A.V.
(Tomsk, Tomsk Polytechnic University)

This article describes the the importance of the development of "electronic government" system, which is an integral part of public administration. This system can be carried out through the introduction and integration of information technology, taking into account the administrative changes that are taking place in Russia.

Keywords: electronic government, corruption strategy

Введение. Сегодня в России делаются важные шаги для развития системы «электронного правительства» или публичного правительства, как ее еще называют, которая является мощным инструментом административной реформы, а также программой борьбы с коррупцией. Она позволяет повысить глобальную конкурентоспособность российских компаний и качество жизни российских граждан.