

## ABSTRACT

Master thesis: 139 p., 31 fig., 45 tabl., 2 appendixes, 30 sources.

The object of study - processing the results of parliamentary elections to the Verkhovna Rada of Ukraine I - VII convocations (1990 - 2014).

The subject of research - methods of measuring the distribution of power between players in collective decision-making bodies on the condition of occurring correlation between the voters.

The purpose - to examine the subject of study, to identify the parameters influence the effectiveness of some models used in the election process.

The research methods - analysis and comparison of existing methodologies for measuring the factions' (groups') impact on the adoption of collective decisions; simulation of calculation voting power measures based on factions' (groups') size and their political views on the coalition formation.

The actuality – determination of factions' (groups') measure of voting power to make a decision will predict the most likely political, economic, social and other processes in the country and internationally; determine the nature of the political system as a whole; calculate the best faction's strategies in the pre-election period.

The results –the results of parliamentary elections to the Verkhovna Rada of Ukraine I - VII convocations were analysed by the Banzhaf power index and ordinal  $\alpha$ -index. It is shown that the power of faction (group) might significantly differ from its share of seats. It is found as well that if  $\alpha$ -index is used centrist factions (groups) increase their power while factions (groups) with radical positions decrease their power.

ELECTORAL SYSTEM, REPRESENTATIVE DEMOCRACY, WEIGHTED VOTING SYSTEMS, VOTING GAMES, THE BANZHAF POWER INDEX, THE SHAPLEY-SHUBIK POWER INDEX, THE ORDINAL  $\alpha$ -INDEX.