This thesis is an introducion to the theory of coalition games intended for readers
oriented on formal disciplines (logic, mathematic, game theory) as well as on humanities
(political science and sociology). Basic de   nitions, characterization of voting systems, definition
of weighted and unweighted voting systems are introduced. The next part of the
thesis focuses on indexes of power (Shapley-Shubik, Banzhaf, Johnston, Deegan-Packel).
The last part of thesis addresses the application indexes of power. Comparisons of indexes
of the EU countries in decision-making proccesses of the Council of the European Union
in accordance with the Treaty of Nice and the Treaty of Lisbon are presented.