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Qualitative models of bankruptcy proceedings using multi-expert complex decision making

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Abstract

Purpose of the article There is a broad spectrum of BP (Bankruptcy Proceedings) models. They are unique, partially subjective, inconsistent, vague and multidimensional. It is therefore often prohibitively difficult to analyse them using numerical quantifiers. Oversimplified or highly specific BPs are sometimes obtained. Their practical applicability is therefore (very) limited. A qualitative heuristic is described using just trends; i.e. There are just three trend / qualitative values used to quantify variables and their derivatives: plus/increasing; zero/constant; negative/decreasing. There are qualitative BP knowledge items in equationless forms such as heuristics. For example – if standard of ensured justice is increasing then level of creditors bullying is decreasing. It means that not just simple trends but higher derivatives can be incorporated into a model if they are known. No quantitative quantifiers, e.g. numbers, are used in this paper. The solution of a trend model $M(X)$ is a set S of scenarios where X is the set of n variables. The set of variables X is subdivided into the following subset V, G, O; The key information input into BPs is expert knowledge. The case study presents a model based on integration of equationless relations using 8 variables e.g. selling of assets, bullying of creditors or ensured justice. V variables are variables controlled by a decision maker, G is the set of goals, O is the set of variables outside any control of a decision maker. Any future and past time behaviour of the system under study is described by a path within the graph H. A complex decision is represented by a path represented by a sequence of scenarios. The decision is partially predetermined by the final discrete set of paths and partially by common sense reasoning of the decision maker. A eight-dimensional model serves as a case study.

Methodology/methods A qualitative heuristic described by using just trends; qualitative values used to quantify variables and their derivatives: plus/increasing; zero/constant; negative/decreasing.

Scientific aim Using qualitative research for determination of bankruptcy proceedings.

Findings Finding an equilibrium for satisfaction of all interested creditors and at the same time best solution of debtors assets.

Conclusions Identification and determination of vague determinats of bankcruptcy proceedings affected by macroeconomics aspects to goal a creditors satisfaction and debtors assets solution.

Keywords: Qualitative, Decision, Scenario, Bankruptcy, Multidimensional, Multi-criteria, Multi-expert, Macroeconomic

JEL Classification: G33, G34

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