

RATIONALITY OF STATE SUBSIDIES – A THEORETICAL APPROACH

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Abstract

The states intervention on the economics, especially direct measures are in focus of the 21st centurial economic and legal interest. Analyzing the concepts of European and global thinkers and regulators on the competition and state aids, it is obvious that the protection of competition and to ensure the market's integrity is a priority for all, but realizing the vulnerability of the markets as seen in 2008, the protectionism is under discussion again. However, when we try to understand the state's role in economy and if we want to evaluate the state's actions, we have to decide the viewpoint, the scale of rationality under we can examine if the action was rational or not. For this evaluation we can declare the state as a player in the economy, where his actions (if rational) can be predicted. For this evaluation and for the possibility of prediction we can use the terms of game theory. The study gives an introduction to the game-theoretical approach of state actions.

Keywords: *rationality, state subsidies, action of the state, game theory, respublica ludens*

Introduction

Game theory and game theoretic approaches of economical and political actions are in the focus of modern literature of economics. We cannot escape from facing this approach in the legal field as well.

In some aspects, mathematicians and economic specialists modelled some types of legal field: the bargaining process², the contractual forms, labour markets³. Although there are several thesis and model on the understanding of economical actions, there is only few theorems on how to understand the state actions pursuant to legal rules.

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² Pl. Roth, A.E. (szerk) 1985: Game-theoretic models of bargaining. Cambridge University Press, Cambridge.

³ Eg. Stiglitz, J.E. – A. Weiss: Incentive effects of terminations: Applications to the credit and labour markets. American Economic Review, 1983. Vol.77. 912-927.p.

This study is to give some introduction to the roots of game-theoretic approach of state actions.

1. Theories on the role of state

Using the results of Niklas Luhmann's theory on the social life's function-specified fields⁴, modified with Jürgen Habermas and and the Hungarian law-philosophers of Hungarian Béla Pokol⁵ and Lajos Cs.Kiss, we can say, that under the fields of Religion, Art, Science, Economy, Politics, Law and Moral, we have to find the territory of the state. While professor Cs.Kiss states that from the aspect of creating the social order, state only belongs to the field of Politics and Law, together with the author of this study, Béla Pokol states that we can place the state to a common field of Economy, Politics and Law, which are the field that determinate the social order.

As from the aspect of rationality, the spacing of the state has serious consequences: every field has his own standards on rational action. The economy is based on the useful/useless value-code, the politics on the friend/enemy code⁶, and the law on the legal/illegal value-code. If we place the state on one of these fields, at the same time we state, that the state works by the same value-code, and along this value we can evaluate a state action's rationality. If we see the state in Schmitt's aspect, as a 'total state', where every social problem or phenomenon is a problem of the state as well, than the rationality of state is dependent of all these binary codes. This leads to the consequence, that evaluating a state action as a rational one, we have to take into account all upper mentioned field of social life.

Using the strait interpreting of the territory of state in the social fields, we have 3 approaches to examine the state's rational actions depending on the field, that claims to have priority above the others. If we only see the state as one part of the economic entities, than the question is the following: are the state aids regulated and awarded on

⁴ Niklas Luhmann: *Ausdifferenzierung des Rechts. Beiträge zur Rechtssoziologie und Rechtstheorie.* Suhrkamp, 1999.

⁵ Pokol, B.: *Piacosítás és új uralmi rend. Jogelméleti Szemle, 2003/4. szám.* Downloadable: <https://jesz.ajk.elte.hu/pokol16.html>

⁶ Luhmann's declared value codes has been changing with time, but his final commitment was the government-opponent code. Béla Pokol proofread this by stating that the code should be "cathing governance – going opponent" is a better expression. Carl Schmitt sees the politics as a binary code of friend-enemy.

the economically useful/harmful value-code, or not? If we see the state as a primary “political”⁷ phenomenon, than we examine the state actions from the aspect of political value-codes of friend-enemy, and the adequate question is whether the state action is defined as it supports the friends (from the aspect of the next election), and sets back the enemies of the state. Finally, if our point of view is that a state is basically a legal creation, and governed by the legal-illegal value-code, while evaluating it’s action’s rationality we can only seek for the legality of the state action. Every mentioned aspect adumbrates different judgement on state action, and on specified field on state aids.

This study introduces the aspect, that if we declare a state to be only a legal phenomenon by the mean of Keynes, we should not bring him to book for economically harmful or futile actions. Again, if the state (and the government) is basically a political formation, it’s primer standpoint is to win on the next election, and still does not care only on the economic aspects giving state aids to different groups of enterprises.

2. State subsidies in the economics and law

If we want to use and demonstrate the theory of state action to a certain economical phenomenon, as an empirical prove for the model, we have to choose a field that can be viewed as a two-person game, with the players one as the state, and the other as the entities of the economical life. The territory of state subsidies seem to be a suitable “playground”, as the players can be easily identified, and the rules are both known by all parties, and we can create a cooperative and non-cooperative situations as well. As both legal and economical literature is wild on this subject, first I summarize the basic informations on state subsidies and it’s conjugation with the global/national market, and the viewpoints of the main international organizations on the subject.

1. Approaches of subsidies – revised after Buiges and Sekkat 2009 .p.35.

	Transactions covered	Sectoral coverage	Measure ment	Country coverage	Who decides if the subsidy
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⁷ In the meaning of Carl Schmitt’s approach. See: Schmitt, C 1932:Der Begriff des Politischen. München, Duncker & Humblot.

			basis		is distorting?
EU	basically „ <i>financial assistance</i> ” (TFEU: “an advantage in any form whatsoever conferred on a selective basis to undertakings by national public authorities”)	All	Equivalent with the given grant	EU-27	European Commission
OECD	Financial assistance + Rules and regulations distorting competition+ Direct provision of goods and services	All	Net cost to government	OECD Member States	Council (decisions and recommendations)
WTO	Financial contribution by a public body which confers a ‘benefit’	Specified on trade issues	Net cost to government	WTO Member States	WTO Dispute Settlement Body

Sources: OECD (2001), EU legal text, WTO Agreements

3. Game theoretic approach of state actions

If we hypothesize, that the actions of the state are rational (however still not defined by which value code), than its reaction on certain social-economical events should also be rational. If we accept this valid, the forthcoming question is the applicability of game theory-rules on the state, as a player in the game. This is what I call “*respublica ludens*”, the situation when we consider the state as a player in a situation, where his game theoretically rational answers on the other player’s (another state, economic entity, or the citizens in general) decision can be predicted, and the strategy of the state can be defined.

Game theory is one of the most dynamically developing science in the 21st century, where it is orientated from his mathematical roots more to the field of social

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sciences⁸. According to the state's role in the game, so far the economical literature gave the information, but on the connected fields we can find researches: game theory of elections⁹, military conflicts¹⁰ or complex economical questions¹¹, so the researches are getting closer to legal fields as well.

After identifying the state as a player, we have to define the space of the game, or the playing field, the prevailing territory of the state actions. On this point I have to divide the interactions between the states (which is not under the observation of this present study) and the relation between state (nations) and its citizens, and the further examination is only concerned to the latter one¹².

From the legal theories of state action-models, I stand on the ground of Max Weber¹³, Jürgen Habermas¹⁴ and Niklas Luhmann¹⁵.

To use the correlations of theory of action, first we have to work with 3 aspects of Weber's sense of rationality: in the methodical way of living the *instrumental rationality* is inherent, which is the solution of technical tasks, the *strategic rationality*, which is the consistent choice between possibilities, and finally the *normative rationality*, the solving of practical tasks by the line of moral and legal rules. Among these rationalities, the game theory can add several surplus to the strategic rationality, what can be seen as a judgement born as a result of given preferences and theorems after the balancing the other player's preferences as well.

On the opening pages of *Economy and Society*, he sketches four ways in which action may be determined. Traditional action is determined by longstanding habits, affectual action is by strong feelings, "wertrational" (value-rational) action is determined by a conscious belief in the intrinsic value of acting in a certain way regardless of the

⁸ Creating the basis of game theory we should mention some famous Hungarian scholars like John von Neumann, whose publication with Oscar Morgenstern gave the principles for the economical approach of game theory. János Harsányi got the Nobel-prize for his work on game theory.

⁹ Eg. Stephen J. Brams 2007: *Mathematics in Democracy: Designing better voting and fair-division procedures*. Princeton.

¹⁰ Eg. J.C.C. McKinsey 2003: *Introduction to the Theory of Games*. Dover Publications.

¹¹ Eg. P. Borm – H. Peters (eds) 2002: *Chapters in Game Theory*. Kluwer Academic Publishers, New York.

¹² I think that the basic principles for the international state connections are entirely different from those in the linkage of state and citizen.

¹³ M. Weber 1978: *Economy and society: an outline of interpretive sociology*.(eds: G. Roth- C. Wittich) Vol.1-2. University of California Press.

¹⁴ J. Habermas 1984: *The Theory of Communicative Action*. T.McCarthy Boston. Beacon Press.

¹⁵ N. Luhmann: *Zweckbegriff und Systemrationalität*. Tübingen, 1968.

consequences of acting so, and “zweckrational” action, which is determined by a consciously calculating attempt to achieve desired ends with appropriate means.

Understanding the state action, we have to add Habermas’ theory on communicative action. In his definition, communicative action is opposite to strategic action, and means the actions that are not only for the personal wellness and advantage of the actor, but synchronized with the help of mutual understanding.

By the rules of game theory in state actions, this communicative actions can only be observed among cooperative games, when the state action and the social answer can be discussed through social conciliation, so when the players are cross-checking each other steps. The communicative actions are divided in 3 parts, one is for the explicit representation of knowledge, one is for showing one’ self-portray, and the third is the norm-conformative action, which represents moral-practical knowledge, and it’s benchmark is the ‘correctness’.

If we synthesize the state actions with the rationality of state aids, we got the following cases.

2. The allocation of state subsidies under game theoretic modelling

	ENTERPRISES			
			Purposive-rational	Norm-conformative
GOVERNMENT	ECONOMICAL ACTOR (useful/useless)	Purposive-rational	Enterprises with growing potential get support	Specified group apply for and get subsidies
		Norm-conformative	Enterprises chosen by lobby pressure under legal frames.	Only few fields of support are opened.
	POLITICAL ACTOR (friend/enemy)	Purposive-rational	Under maximized lobby pressure, maximized support	Maximized amount for the applying groups
		Norm-conformative	Changing the legal framework for more possible support	Legally maximized aids
	LEGAL ACTOR (legal/illegal)	Purposive-rational	Lobby pressure on changing and widening the legal frames	The support activity is merely a “process”
		Norm-conformative	Few and specified aids	Almost no aids, or only by social aspects

Summary

If we put together the outcomes of state philosophy, economy and game theory, we are able to create a method under the rationality of state actions can be evaluated. To reach this, we have to deal with the pre-question: where to put the state among the fields of functionally differentiated social fields. Is the state basically and fundamentally a political, a legal or an economical phenomenon? This distinction has certain consequences on the rationality of the state: how can a state act to reach all the aspects of rationality while answering to a social problem, or an economic question. If we want to evaluate the rationality of a certain state action, we have to take into account the followings:

- rationality by the legal-illegal value-codes (rationality of law)
- rationality by the useful-useless value-codes (economical rationality), and
- rationality by the friend-enemy codes, or rationality of getting closer to the governing status (political rationality).

Supplementing these with the communicative action's theory, we can detail the state actions in the economic field of state subsidies to purposive-rational and norm-conformative actions, which makes difference between cooperative and non-cooperative attitudes by the government by certain types of intervene to the economy. If we hypothesize, that the state is something that is working by both 3x2 rationalities, without priority, than the best solution (the game-theoretically rational choice) in a certain social/economical situation is which has the most advantage (game-theoretically the biggest pay-off) in all fields.

Seeing the question from the other side: evaluating a state measure *ex post*, calculating with all the possible decisions could have been made in the situation, we can model which rationality dominated a state action.

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