

# Accepted Manuscript

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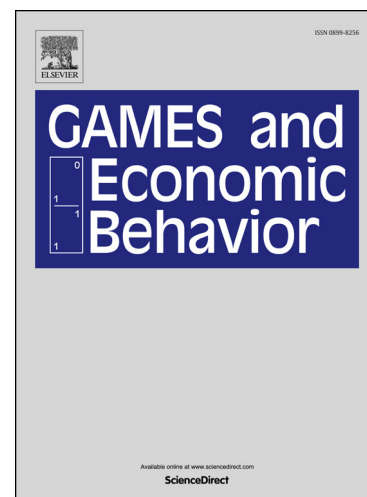
PII: S0899-8256(18)30023-X  
DOI: <https://doi.org/10.1016/j.geb.2018.01.012>  
Reference: YGAME 2830

To appear in: *Games and Economic Behavior*

Received date: 29 August 2016

Please cite this article in press as: Derks, J. The Shapley value of conjunctive-restricted games. *Games Econ. Behav.* (2018), <https://doi.org/10.1016/j.geb.2018.01.012>

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# The Shapley Value of conjunctive-restricted Games

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August 2016

## Abstract

We consider transferable utility games, where restricted cooperation is modeled by a fixed mapping assigning to each coalition the set of players that are controlled by this coalition. We study the Shapley value on the resulting class of restricted games, and provide axiomatic frameworks characterizing this value. Studies show that several classes of so-called conjunctive restrictions lead to frameworks similar to the original introduced by Shapley in 1953. We show that conjunctivity of the restriction is not only sufficient but also necessary.

JEL-code: C71

*Key words:* Transferable Utility games, restricted cooperation, Shapley value, axiomatic approach, conjunctive restriction.

## 1 Introduction

Let  $N$  be a fixed, finite set of players. A transferable utility game  $v$ , also called a coalitional game, is a real valued function  $v$  on the subsets of  $N$ ,

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