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# A Commentary on a New Pricing Mechanism for Pharmaceutical Supply Chains: A Game Theory Analytical Approach for Healthcare Service

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## Commentary

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### **DESCRIPTION**

The study of developing novel cooperative strategies for reducing the franchise-related costs in the pharmaceutical supply chain. The paper argues that the pharmaceutical supply chain accounts for a significant proportion of healthcare costs and the government has to control and regulate it. One way to achieve this is by forming a cooperative strategy between the domestic manufacturers and foreign licensors. The authors use cooperative game theory to model the negotiations between the government and the cooperative firm. The paper concludes that such a strategy can reduce franchise-related costs for the government while increasing the manufacturer's income. Health care services are extremely useful to customers because they have a substantial impact on saving lives. But, without adequate control, the cost of such services may be very high.

source are credited.

The paper's strengths lie in its thorough review of the current literature on pharmaceutical supply chains and cooperative strategies. The authors provide a clear context for their research by defining the dynamics associated with a pharmaceutical supply chain in particular and the healthcare delivery system in general. They also provide a detailed overview of the challenges faced by the pharmaceutical supply chain, including high costs, limited competition, and the importance of patient needs as a basic human right. The paper's contribution to the literature lies in its proposal for a new pricing mechanism that could fairly distribute the synergies and value resulting from cooperation. The authors use cooperative game theory to model the negotiations between the government and the cooperative firm. They also conduct a sensitivity analysis to show how different situations can affect the pricing decision and the distribution of the resulting surplus between partners. The authors also provide the necessary and sufficient conditions for cooperative strategies, which could be of practical use to decision-makers in the pharmaceutical supply chain.

One limitation of the paper is that it only focuses on the Iranian pharmaceutical industry. The results may not be generalizable to other contexts, and further research is needed to validate the findings in other countries. The paper could have also benefited from a more detailed explanation of the cooperative game theory used to model the negotiations between the government and the cooperative firm at a global level. Another limitation of the paper is that it does not consider the ethical implications of forming a cooperative strategy between domestic manufacturers and foreign licensors. The authors acknowledge that the value of health services for customers is very high, and the lack of appropriate control can result in the supply price of such services running to an incredible amount. However, they do not discuss the potential ethical issues of reducing franchise-related costs for the government while increasing the manufacturer's income.

In conclusion, the paper provides a significant contribution to the literature on pharmaceutical supply chains and cooperative strategies. The proposed mathematical model could help decision-makers and practitioners in the pharmaceutical supply chain to reduce costs and improve the long-term performance of the supply chain. However, as mentioned the paper's findings should be validated in other contexts, and the ethical implications of forming cooperative strategies should be carefully considered for future research.

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