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硕 士 学 位 论 文

# 中国房地产市场博弈分析

## Analysis on Chinese Real Estate Market by Game Theo ry

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我国近几年来出现的房地产市场过热现象,可以视为各种力量和利益集团博弈的综合结果:中央政府的集权冲动和过度干预市场的行为,地方政府的利益短期化和相互间协调的困难,房地产商追求高额利润的本性和默契的垄断行为,消费者的过度投机和对调控政策的反向预期等等。基于这一理解,本文利用揭示人际之间合作与冲突的博弈理论,将房地产市场的各种主体行为理论化为一系列一脉相承、逻辑一致的博弈模型,求出各博弈的合理均衡解,并进一步阐释这些均衡对现实经济的意义。本文的主要结论是:我国房地产市场过热现象是分利联盟和强权集团在不完善的监督制度下的寻租行为导致的,是成本推动和投机拉动共同作用的结果,上、中游环节的层层权力垄断和利益瓜分大幅推高了下游的房价,过热的结果将导致财富分配的大规模转移;不完善的监督制度容易产生政府失灵,而在市场和政府双失灵的状态下,诸多试图调控房地产市场的宏观政策都将达不到理想的效果,因此建立一个有效抑制利益输送的博弈规则是控制房地产市场过热的根本途径。

全文共分五章,主要内容如下:

第一章,引言。揭示论文的研究背景、方法和创新之处,梳理相关文献,阐明分析工具的可行性。

第二章,基本要素。表述博弈的研究对象,包括主体、客体和关系,并对参与者的行为特征做了全面的分析。

第三章,具体解析。这是全文的重点。按房地产市场生态链的展开方向将博弈分解成以中央政府、地方政府、房地产商、消费者为主体的两两相互关联的子博弈,这些博弈的基本特征就是个体的理性行为共同造成了集体的非理性结果。

第四章,总体分析与评价。对上一章各种结论进行综合梳理,并指出博弈产生的制度根源:首先采用蜈蚣博弈模型<sup>®</sup>构造出我国房地产市场的生态全景,对其整体运作过程做了清晰的阐述,指出在双失灵的状态下,食物来源会尽可能多地被上中游蚕食,这是造成下游房价高涨、房地产生态环境恶化的直接原因,而

<sup>&</sup>lt;sup>©</sup>Robert Rosenthal. Games of perfect information, predatory pricing and the chain-store paradox[J]. Journal of Economic Theory, 1981(25), p(92-100).

监督制度安排的不合理则是双重失灵的深刻根源。因此完善房地产市场的制度监督体系,建立一套有效的政府自我约束机制,促使其严格遵循以治理市场失灵为己任的行政方针,才能从根本上改变这种局面。

第五章,结语。对全文思想概要进行阐述。

关键词:房地产;博弈;纳什均衡

#### **Abstract**

China's economy is now in the golden age with high-speed development, the central government delegating powers and benefits, local gov ernments' functions at all levels are growing, the boundary of market's self-adjusting area broads increasingly, all indicate that the power of market is rising rapidly. However, the reform is not a quick process, partial confusion even regression are inevitable sometimes. As has being revealed by the North's Paradox, Government is the main force to define property rights and promote market-led structure which contributes much in the process of economic development, but it may also become the ultimate hindering forces. As the former of the rules, how to master the relationship between athletes and referees is the important issue that the Government has being facing. China's real estate market is a typical industry which develops most rapidly as whi le as one of the most disorder industry in recent years. High price is clearly not conducive to economic's sustained development and the stability of society, some government officials and interest groups are colluding with each other and creating artificial obstacles to harm the healthy development of the market economy. As the reason, the overheating of the real estate market is a complex result caused by the mutual effects between the various forces and interest groups, and it is also a reverse in the decentralized and market-oriented reform: central government's centralization and the excessive intervention, the local government's short-term interests and the difficulties of mutual coordination, the real estate enterprises pursuit high profits and form the privity between each other, the consumers' excessive speculation and reverse expectations on the regulation and control, and so on. So the overheating does not occur accidentally, but the inevitable product of conflict under the imperfect supervision system. For the real estate market, it is very difficult to give a reasonable description of this field by the traditional economic theory in which people were modelled as the mechanical response objects, but game theory which was gestated by the modern humanistic ideas is the right tool to analyze the cooperation and

interpersonal conflict between individuals in it. This paper at tempt to theorize various individuals behavior in the real estate market as a series of game models which own the same strain, the same logic, then find out the reasonable balanced solution in each game and interpret the significance of these balanced points with economic reality. The main conclusion is that: China's overheated real estate market is caused through the rent-seeking behaviour by the narrow interest unions and power groups under the imperfect supervision system, and also the result of cost-push and speculate-pull power. The behavior of interests' carved up and powers' monopoly of the top and middle reaches sharply pushed up the price of the downstream. The overheating will lead to large-scale redistribution between the society. Imperfect supervision system prone to cause government failure. Under the state of the market and the government's double failure, any policy that attempt to macro-control the real estate market will not achieve the desired effect, therefore, establish a rule of game which can effectly inhibite the transfer of benefits is the fundamental way to control overheated state of the real estate market.

Keywords: Real Estate; Game Theory; Nash Equilibrium.

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