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Challenges of the development for automotive parts remanufacturing in China

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Abstract: Investigation is conducted to understand the development status of Chinese automotive parts remanufacturing, and analyze the reverse logistics framework, operation mode, and problems faced in the development of remanufacturing companies, some cases are given to illustrate current status. Policy orientation and profitable experiences in developed countries encourage some companies to engage in remanufacturing business, and the development of the remanufacturing industry is under the guidance of the government. However, research results show that many remanufacturing companies obtain low incomes. The remanufacturing industry is a complex industry. Remanufacturers, manufacturers, dealers, service stations, consumers, and their interactions all affect the industry. Refurbishing firms and the government are also involved in this business, with the latter playing an important role. The analysis of interaction effects indicates that the current development status is caused by multiple barriers, and these barriers can also be found in other emerging economies. Finally, several recommendations are proposed to improve the remanufacturing system and promote a reasonable market rules.

Keywords: Remanufacturing; Diesel; Policy; Recycle framework; Core; Refurbish

1. Introduction

Remanufacturing is still an emerging industry in China. Policy orientation and profitable experiences in developed countries encourage some companies to engage in this business. The development of the remanufacturing industry in China is under the guidance of the Chinese Government, which has been adopted a pilot demonstration system to guide remanufacturing companies to develop in a larger scale and standardized manner. The National Development and Reform Commission (NDRC) organized the first batch of automotive parts remanufacturing pilots in 2008, and 42 pilot companies have involved in the remanufacturing of engines (NDRC, 2008). In 2013, the “Internal combustion engine remanufacturing propulsion plan” set goals for industrial development (Ministry of Industry and Information Technology, MIIT, 2013). This goal aims to increase the production capacity and enterprise scale of the engine remanufacturing industry, as well as significantly improve its technology and equipment level by the end of the 12th Five-year Plan. Thus far, the industry plan is far from being completed. This study investigates the development status of Chinese automotive parts remanufacturing companies and discusses the problems faced by this industry.

The paper is divided into six sections. Section 1 presents the introduction. Section 2 describes the survey and development status of the Chinese automotive parts remanufacturing. Section 3 analyzes the relationship and interaction between all remanufacturing stakeholders. Section 4 provides several suggestions for building a fair remanufacturing industry. Section 5 is conclusion. Section 6 presents the
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