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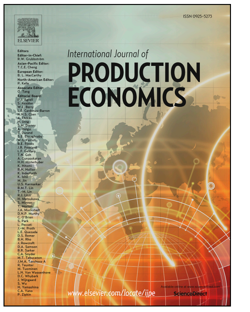

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The Interaction between Product Rollover Strategy and Pricing Scheme

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Abstract: In high-tech and innovative industries, many firms make joint decisions on product rollover strategy and pricing scheme and offer trade-in programs under some circumstances to encourage repeated purchasing. This paper studies the interaction between product rollover strategy and pricing scheme with trade-in program offered, by proposing a two-period model incorporating market heterogeneity and consumers' forward-looking behavior. The results show that for both single rollover and dual rollover, the firm is better off following price skimming when consumers are not strategic enough, and product salvage value is low compared to new product innovation level; otherwise, penetration pricing is preferable. For given pricing scheme, the firm's optimal rollover strategy depends on product innovation level, salvage value, and how strategic the consumers are. Under either rollover strategy, the firm has no incentive to offer the trade-in program under the circumstances when product innovation level is low, product salvage value is extremely low or high, or consumers are not strategic enough.

Key Words: product rollover; trade-in program; strategic consumer; pricing scheme; sequential innovation; market heterogeneity

1. Introduction

With the rapid development of technology and economy, manufacturers are launching new products more frequently than ever to expand their market shares and increase their profits, particularly in high-tech industry, e.g., smartphones, tablets, and wearable devices (Koca et al., 2010). With more new products available, some firms

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