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## **STRATEGIC R&D SUBSIDIES AND PRODUCT DIFFERENTIATION WITH ASYMMETRIC MARKET SIZE**

### **Abstract:**

We examine the impact of market size difference on the government R&D policies to provide strategic advantage to domestic firms competing with foreign firms over differentiated products. Based on a model where firms make endogenous decision on the R&D investment to reduce the production cost, we demonstrate that as the level of product differentiation is lower with higher competition between firms, a country with a smaller market size has a higher incentive to provide R&D subsidies more aggressively. Contrarily, when the level of product differentiation is higher with lower competition between firms, a country with a larger market size has a higher incentive to provide R&D subsidies. These findings implicate that when a large economy has a higher market power with more differentiated products, the R&D policy incentives will aggravate the asymmetry between the large economy and the small economy. Therefore, additional measures are required to counterbalance the increasing inequality between asymmetric countries when the level of product differentiation is higher than the critical level.

### **Keywords:**

Strategic R&D Subsidies, Asymmetric market size, product differentiation

**JEL Classification:** F12, F13, L52