

**ENTRY, EXIT, AND DIFFUSION  
WITH  
LEARNING BY DOING\***

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**ABSTRACT**

A perfect-foresight model of entry and exit for an industry is developed. Early entry has the advantage of higher revenues per unit of output as the price is higher early on. Late entry has the benefits of learning from the experience of earlier entrants, and hence lower production costs. These advantages are balanced off in a continuous time perfect foresight equilibrium. Exit takes place because the operation of high-cost, early-vintage technologies becomes unprofitable. The model generates S-shaped diffusion -- a well documented phenomenon in a wide variety of industries -- as well as staggered entry and exit, in a deterministic context. Examples are explicitly solved.

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