

each firm under either entry mode, and that upstream firms choose to share the incumbent's facility when the entrant's fixed cost exceeds a positive threshold. In addition, welfare analysis shows that in many situations the market can efficiently solve the trade-off between fixed-cost savings and softened downstream competition, thus providing a rationale for the liberalization of such industries. Several competition policy implications are discussed.

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## PATENT LENGTH AND THE TIMING OF INNOVATIVE ACTIVITY

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The standard result in patent policy, as demonstrated by Gilbert and Shapiro (1990), is that infinitely lived but very narrow patents are optimal as deadweight losses are minimised and spread through time but inventors can still recover their R&D expenditures. By extending their innovative environment to include timing as an important choice, we demonstrate that a finitely lived, but broader, patent can be socially desirable. This is because a patent breadth is a better instrument than length to encourage socially optimal timing. Thus, patents need not be infinitely long in order to encourage a greater number of inventions

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