

What's a Drug Patent Worth After it has Expired?
A Study of First-Mover Advantages in the Market for Prescription Drugs
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When a drug patent expires, the innovator often succeeds in preserving important market shares despite the availability of cheaper and seemingly equivalent generic drugs. Such demand inertia in the post-patent market has sometimes been referred to as the “generic competition paradox”. It has frequently been attributed to the existence of a segmented market where some buyers are reluctant to switch to the generic versions of a drug. However, few efforts have been made so far to give an explicit account of the mechanisms that explain the innovator’s competitive advantage over generic imitators. To shed light on this question, we undertake a survey of previous research relating to the demand structure and firm behaviour in the post-patent market for prescription drugs. Assembling the results of theoretical and empirical contributions with the innovator’s perspective in mind, our paper argues that the patent holder benefits from decisive first-mover advantages that outlast the patent lifespan. The value of a patent is thus not limited to its immediate benefits from protecting the innovator against imitation during market exclusivity, but reaches well beyond patent expiration. Being first to the market enables the innovator to benefit from switching costs and habit persistence, which can translate into demand stickiness and long-lasting brand loyalty. However, the latter are conditional on several factors that are characteristic of demand behaviour in the drug market, such as the physician-patient agency, the experience and credence qualities of medicines, informational imperfections, and in particular the externalisation of the cost factor. Our survey seeks to provide a better understanding of how these factors interact with each other and how they shape the patent holder’s competitive advantage. For a practical approach to the problem, we will empirically assess the innovator’s competitive advantage in the French market for off-patented prescription drugs. Significantly, factual product differentiation as a source of competitive advantage is ruled out because the original drug and its generic substitutes are by definition equivalent. Therefore it is reasonable to assume that demand for the original drug is induced by factors linked to brand goodwill and habit effects, i.e. factors that are derived from the innovator’s market exclusivity prior to patent expiry. Our analysis relies on indicators of the innovator’s market power, such as the price premium of the brand name drug, and controls for the factors that are likely to affect demand patterns, such as the intensity of competition from generic drugs, the duration of market exclusivity prior to patent expiry and in particular the externalisation of the cost factor. Due to recent evolutions in the regulatory environment, the French market represents an ideal environment for studying how changes in patients’ price sensitivity affect the demand for off-patented brand name drugs. The introduction of reference price based reimbursement schemes in 2003, namely the TFR (*tarifs forfaitaires de responsabilité*), implies that patients have to pay out of their pockets possible price differentials between brand name drugs and generic drugs. Our preliminary findings from a first empirical study show that the innovator reacts only marginally to generic market entry by adjusting his price. On the other hand, the prices of those drugs whose reimbursement was limited by the TFR have been aligned by the innovator on the level of generic drug prices. This suggests that the pioneer brand can compete with cheaper generic drugs at a higher price as long as patients do not have to pay the price differential.