

# Crowding-out Effects of Public Libraries and the Public

## Lending Right<sup>\*</sup>

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### Abstract

The public lending right (PLR) compensates authors for losses caused by public libraries' free lending of books. It is important to set the appropriate rate to maintain authors' incentives to create new works. We construct a novel data set that integrates bookstores' sales data with copy and loan data from public libraries in Japan and quantify the crowding-out effects of the public libraries. We first control for title-municipality, months-after-publication, and year-month-specific unobserved heterogeneities. We then construct an instrumental variable for library copies by exploiting budget constraints of public libraries. The results suggest that a unit increase in library copy of a title decreases sales of the title in bookstores by an average of 4.251 to 6.737 units in the baseline specifications within 3 years following the publication of the title. However, the effects are highly "progressive": the loss is 15.201 to 49.983 units for books in the top 1/6 of sales and even higher for bestsellers, whereas the effects are negligible for the other books. The total loss in revenue during the data period is 9.5% to 17.1% of actual sales revenue, which is higher than public libraries' expenditure on books. The estimates indicate that the current PLR rate is too low to compensate losses.

**Keywords:** Book; Crowding-out; Copyright; Japan; Lending right; Library.

**JEL Codes:** K11; L30; L67; O34; O38.

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