



## **When users of congested roads may view tolls as unjust**

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### **Abstract**

Though congestion tolls can increase social welfare, the public often opposes them. One explanation for the opposition is that a road user views a congestion toll as punishment for the damage he causes others. Since a user suffers from congestion, he believes that he has already suffered some punishment and therefore it is unfair or unjust to impose a toll in addition. We assume that a person views a congestion toll as unjust if the toll exceeds the difference between the congestion externality a road user generates on others and the uncompensated externality he suffers from others. We explore the implications of such a view. We illustrate how to determine the toll that satisfies this criterion of justice and how the socially optimal toll violates the criterion. We examine how the just toll varies with the parameters of the model. We discuss the implications of alternative definitions of justice and possible extensions of the basic model considered.

*Keywords:* Congestion tolls; Unjust tolls; Social optimum.

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### **1. Introduction**

Though congestion tolls can increase social welfare, the public often opposes them. A common explanation in the literature for political opposition to congestion tolls is that users of the road suffer a loss of utility. A well-known policy implication of this literature is that redistribution of the toll revenue to users (for example, through reducing other taxes or through investments in capacity) would increase political support for congestion tolls.

The public may also object to road pricing when they view a congestion toll as a punishment or as a penalty. The so-called double-payment argument reflects the view. This view was well summarized in a report to the European Commission: "Road users are the true victims of congestion and have to pay for it by longer and longer commuting times. Why should they pay twice for being stuck in queues?" (Harsman, et

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