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The role of attitude structures, direct experience and reframing for the success of congestion pricing

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ABSTRACT

Congestion pricing was introduced in Stockholm in 2006, first as a trial followed by a referendum, and permanently from 2007. Public attitudes to the charges became more negative during the period from the decision to the start of the system. Once the trial started, public attitudes became dramatically more positive over the following years, going from 2/3 against the charges to more than 2/3 in favor of the charges. Self-reported changes in behavior and attitudes considerably underestimate actual changes: about 3/4 of the decrease in car trips and more than half of the change in attitudes seem to have gone unnoticed by respondents, ex post. Self-interest and belief in the charges' effectiveness strongly affect attitudes at any given point in time, but can only explain a minor part of the change in attitudes. I suggest that the debate and the shift in attitudes can be understood as a public and political reframing of the congestion charges over time.

1. Introduction

Urban congestion pricing has been advocated by transport planners and economists for decades as a way to strike a balance between demand for accessibility and the social costs of car mobility. The big obstacle is usually public opposition. Few cities have dared to challenge this opposition, and even fewer have managed to successfully introduce congestion pricing.

The Stockholm experience is an exception. Congestion charges were introduced in Stockholm in 2006, first as a trial followed by a referendum, then permanently from 2007. The trial was forced through by the small Green party in exchange for its support for a national social-democratic government, in the face of public opposition and despite a promise of the social-democratic mayor in Stockholm not to introduce congestion charges. This ignited a heated debate, making public attitudes to the charges even more negative. But once the trial started in January 2006, congestion reductions turned out to be enormous, and public opinion shifted quickly. The referendum resulted in a narrow majority in favor of keeping the charges, and public support continued to increase, eventually reaching around 70% (2011). No political parties want to abolish the charges anymore, and the debate has shifted from the system's existence to how it can be improved and how the revenues should be used.

How did this happen? How could such a controversial policy be introduced, survive a referendum and then settle down as an almost completely uncontroversial fact? The purpose of this paper is to describe and discuss this change in attitudes, using six surveys of public attitudes between 2004 and 2011. Among other things, I investigate to what extent behavior and attitudes can be explained by self-interest variables and beliefs about effectiveness, and to what extent people are able

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to predict or remember changes in attitudes or behavior. The findings are interesting not only because congestion pricing is a potent policy measure, but also because they illustrate how attitudes to new policies are formed and change in general.

The standard economic analysis of congestion pricing acceptability assumes that individuals' opinions are decided by their costs and benefits in terms of time gains, paid charges and the use of the revenues. The conclusion from the standard analysis is that the average driver will usually lose from the charges, since the value of the time gain will be less than the charge, but that the revenues are more than enough to compensate drivers. In order to achieve support for congestion charges, the revenues have to be spent in such a way that a majority of the drivers think that they are better off when they weigh the charges they pay, the value of the time gain and the benefit of whatever the revenues are spent on. This model is often used by politicians, researchers and civil servants alike to understand and analyze public support for congestion charges.

In its simplest form, the model fails to explain the common phenomenon that attitudes become more positive once charges have been introduced (see Tretvik (2003) for Norway; Schade and Baum (2007) for London; Börjesson et al. (2014) for Gothenburg; and below for Stockholm). This change in attitudes is often assumed to be caused by underestimation of the benefits *ex ante*; once benefits appear, attitudes become more positive (Goodwin, 2006). Among commentators, this seems to be the most common explanation by far of the shift in public attitudes in Stockholm and elsewhere. However, it will be shown in this paper that this cannot be the sole explanation for the dramatic change in Stockholm attitudes, and probably not even the most important one. In fact, public beliefs about the effects have changed only little over time, while support for the charges has increased considerably in *all* groups, regardless of beliefs in effectiveness and how much charges one pays. In fact, although self-interest and beliefs about effects strongly influence attitudes in any cross-section, there turns out to be very little evidence that the *change* in attitudes is associated with changes in these variables.

Instead, I suggest a way in these changes can be understood using an attitude formation framework from social psychology (Heberlein, 2012). Analyses in political and welfare economics usually assume that individuals' preferences are stable, consistent and complete, and that attitudes to specific issues are a function of these preferences. In contrast, analyses in social psychology often emphasize that an individual may have several attitudes and preferences which may be unstable, inconsistent and incomplete (i.e. there are issues where people do not have any attitude at all). Attitudes tend to be more developed in issues where an individual for example has a lot of direct experience, has encountered the issue many times, know a lot about the issue and towards which they have strong emotions. When faced with a question where attitudes are weak or non-existent, a respondent's attitude is often formed by associating the question to some other issue which is perceived to be similar and where the respondent already has a strong, well-developed attitude. The new issue then inherits the attitude from the familiar one. A political battle over a new issue where voters do not have strong pre-existing attitudes, such as congestion charges, will hence often be a battle over which attitudes voters will associate the new issue to, or in other words how the issue is *framed*. Hence the importance of terminology, e.g. "road toll" vs. "environmental charge". Depending on which term is used, voters may tend to associate congestion pricing either to attitudes to "tolls" or "taxes" (negative attitudes) or to attitudes to "charges" or "environment" (positive attitudes). Attitudes based on limited experience, knowledge and emotions tend to be less stable, and may change comparatively easy if they are reframed, i.e. associated to another issue. In this paper, I suggest a way to understand the changes in public attitudes as a reframing process, where congestion pricing is reinterpreted (reframed) in several ways over the years.

Understanding this process also helps explaining the changes in political interest and standpoints. Political rationality of congestion pricing may be different from mere public acceptability. While public support certainly affects political standpoints and actions, it is neither a necessary nor a sufficient criterion for political support for a policy. The paper also touches upon the political rationales for congestion pricing: what caused parties to take their initial stances, and what caused the subsequent changes. A central point is that purely technical-rational questions, without a moral dimension or interpretation, do not usually generate sufficient voter enthusiasm to make them worth any political risk. During the debate, congestion pricing was to a large extent proposed and opposed with moral arguments rather than technical-rational ones in a more limited sense. This line of argumentation may have been necessary to make congestion pricing politically interesting – but may simultaneously have made it a more divisive issue.

Section 2 gives an overview of the history of the Stockholm congestion charges. Section 3 explores changes in behavior and attitudes based on six surveys 2004–2011. Section 4 discusses how the attitude formation process may be understood. Section 5 concludes.

2. The stockholm congestion charges – an overview

Just as in many other cities, transport planners and economists had suggested that Stockholm should introduce congestion pricing for a long time, without getting either public or political support. In the early 1990's, road tolls were proposed as a way to partially finance a large infrastructure package for Stockholm. This ignited the interest from environmentalists, who appreciated the traffic management potential of the tolls, even if they did not approve of the revenues partially being used for new motorways. The agreement broke down in the late 1990's, but the ball had been set rolling: several stakeholders carried out analyses of congestion charging schemes, and perhaps more important, the issue had entered the agenda of the environmental movement, in particular the Green party.