

The Stockholm congestion pricing syndrome: How congestion charges went from unthinkable to uncontroversial

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Congestion pricing was introduced in Stockholm 2006, first as a trial followed by a referendum, and permanently from 2007. Public attitudes to the charges became more negative during the period between the decision and the start of the system. When the system started, opinion changed and public attitudes became dramatically more positive over the following years, going from 2/3 against the charges to more than 2/3 in favour of the charges. We discuss various explanations to this change in attitudes, showing that while the traditional explanatory variables self-interest and belief in the charges' effectiveness strongly affect attitudes, they cannot explain the change in opinion. Moreover, self-reported changes in behaviour and attitudes considerably underestimate actual changes. About 2/3 of the decrease in car trips and more than half of the change in attitudes seem to have gone unnoticed by respondents, ex post. We discuss how the debate and the shift in opinion can be understood as a public and political reinterpretation of congestion pricing from a technical-rational issue to a moral issue and back again.

Getting transport prices right is essential to strike a balance between demand for accessibility and its social cost. With increasing problems of congestion and carbon emissions, getting the prices right is becoming ever more important. Urban congestion pricing has been advocated by transport planners and economists for decades. The big obstacle is usually that congestion pricing is almost invariably met with fierce 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 interesting 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. The opposition raged, albeit smugly celebrating the anticipated landslide victory in the next election. But once the trial started in January 2006, the congestion reductions turned out to be enormous, and the opinion quickly shifted. The referendum resulted in a narrow majority in favour of keeping the charges. After the referendum, public support continued to increase, eventually reaching around 70% support. Eventually, no political parties wanted to abolish the charges, and the debate 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 this change in opinion and discuss a number of explanations. The discussion rests on

analyses of six surveys of public attitudes carried out 2004-2011. Among other things, we investigate to what extent behaviour and attitudes can be explained by self-interest variables and belief in the charges' effectiveness, and to what extent people are able to predict or remember changes in attitudes or behaviour. 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, and may hence be applicable to other reforms – in particular environmental policies.

While variables relating to self-interest and belief in the charges' effectiveness strongly affect attitudes across groups at any given point in time, they do not seem to be sufficient to explain the observed changes in attitudes across time. A particularly striking result is that the U-shape of attitudes across time – more negative attitudes before the introduction of the charges, and increasingly more positive attitudes after the introduction – is so similar across all groups, regardless of travel patterns, car ownership and belief in the charges' effectiveness (*ex ante* and *ex post*). In fact, this pattern is in fact *more* pronounced for unaffected groups, those who do not pay the charges. The “economic man” paradigm seems to be insufficient to explain attitudes, and especially attitudinal changes, however. Kanske I synnerhet I detta fall, I en fråga där man inte har erfarenhet och förstahandskunskap. Preferenserna är helt enkelt vare sig stable eller complete.

On the other hand, the “economic man” paradigm turned out to work well enough to predict *behaviour*. The behavioural response to the charges could be predicted by simple, objective variables such as travel times and travel costs, using models based on utility-maximizing behaviour and observations of cross-sectional differences. In fact, the model could predict behaviour better than people could themselves, *ex ante* as well as *ex post*: about 2/3 of the disappearing car trips seem to have gone unnoticed by respondents. Similarly, more than half of those who became more positive to the charges during the trial claim that they have not changed their mind.

This paper has discussed several possible explanations for the change in attitudes over time. For example, car owners who were not objectively affected by the charges may have been alienated by a perceived anti-car rhetoric; the broken election promise may have upset voters, and the democratic legitimacy after the referendum and subsequently negotiated agreement may have increased support. The phenomenon can be seen as a form of loss aversion, a resistance against any change – first against introducing the charges, then against removing them. But calling it “loss aversion” does not make us much wiser: introducing a term does not explain what is driving the attitudes.

The explanatory model that seem to best explain our observations seem to be the attitude formation model from social psychology. At first, few people have any particularly strong attitude towards congestion pricing; if they have, groups with strong environmental attitudes tend to cluster it to this group of attitudes, while groups with strong attitudes regarding taxation, public interventions and individual freedom and mobility tend to cluster to this group of attitudes. When the debate becomes more intensive, attitudes become stronger and more pronounced, and voters more polarized. This development is enhanced by the use of moral and emotional arguments. But once the debate calms

down, attitudes become less strong, and congestion pricing may be judged more on its objective purposes and effects. As a technical-rational solution to congestion and a need to generate revenues, it may have a better chance to gain support. Note, though, that while the congestion reduction and revenues do not seem to generate sufficient enthusiasm to make introducing congestion pricing worth the political risk, these arguments may be sufficient to make the charges survive once they have been introduced.

It is slightly paradoxical that while relatively simplistic “economic man”-type models seem to be able to predict aggregate behaviour, they do not seem to be sufficient to predict attitudes with any precision. It raises the question to what extent valid normative rules can be derived from these models. If economic welfare evaluation, derived from observed behaviour, predicts that individuals should oppose a certain reform, but it turns out that they support it – how do we interpret this? Even more difficult: if preferences do not seem to be stable, as we have seen in this paper, such that the same population first opposes, then supports the same policy, without any new information or effects having been added – how do we evaluate such a reform? Is it ethical to advise politicians to introduce policies against popular support, with the argument that the voters will be positive afterwards? Abandoning the notion that individuals on average, most of the time and in most situations act in their own best interest opens the door for all sorts of paternalism. The findings in this paper cannot answer to these questions.

References

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