

Attitudes towards road pricing and road tolls

Survey design and data description

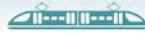
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In this report, we document the design and data collection and present selected results of a large survey on support for universal distance-based road pricing in Norway. In the pilot survey, a link to the questionnaire was shared on social media (Facebook). In the main survey, a sample of Norwegian individuals were recruited using the population register. The main survey sample is quite representative of the Norwegian population, but there is a slight over-representation of urban residents, people with high education and income and voters of environmental parties. Many respondents are negative towards universal road pricing and do not expect the policy to have positive effects. Still, slightly more respondents are positive towards road pricing than towards current road tolls. Attitudes vary considerably by gender, education, travel mode and political party. Interestingly, many respondents seem quite uninformed about what they currently pay in road tolls.

Road tax reform is high on the political agenda in Norway and other European countries. This report documents the results from a study on public support for universal distance-based road pricing and attitudes towards transport policies more generally. This is the first time such a survey has been conducted in Norway. This data has been and will be utilized in several publications. The objectives of this report are to:

1. Document the survey design and data collection
2. Describe the samples in terms of socio-demographic characteristics
3. Show descriptive results regarding location of the trip, travel behavior and road toll costs (self-reported and calculated)
4. Show descriptive results on attitudes towards road pricing and road tolls as well as other political views
5. Evaluate the representativeness of the samples and discuss implications for the interpretation of the results

Attitudes towards road tax reform must be interpreted in light of the policies currently in place. In Norway, car drivers pay road tolls on many trips, both in urban areas and on inter-urban highways. In the questionnaire, we remind respondents about the current policies and explain how universal road pricing will replace these. Since opposition towards road pricing could potentially be related to concerns about distributional effects and privacy, we include questions about attitudes towards inequality and trust in institutions.



Our questionnaire was developed for a similar study in Spain (Madrid) and revised in several rounds. The final questionnaire consists of the following parts:

- a) Introductory questions about place of residence and car ownership
- b) A simplified travel survey about a typical daily trip
- c) Questions about perception of and attitudes towards economic inequality
- d) Introduction to road pricing and a stated choice experiment with different road pricing policies
- e) Questions about voting behavior, trust in institutions and attitudes towards transport pricing policies
- f) Questions about socio-demographic characteristics

In this report, we do not show the results from the stated choice experiment (d) but focus on travel behavior and attitudes towards transport pricing policies more generally.

We first carried out two pilot surveys in Madrid, then one pilot survey in Norway prior to the main survey in Norway. The pilot survey in Norway was carried out using a sponsored post on Facebook. This means that potential respondents could have gotten information about the survey either because they were targeted by the sponsored post or because someone in their network shared it or interacted with it. In the main survey, we contacted a representative sample from the Norwegian population register, using the e-mail register of the Directorate of Digitalization (*Kontaktregisteret*).

The net samples included 3,839 respondents for the main survey in Norway and 1,719 respondents for the pilot survey in Norway. Because of the recruitment method used in the pilot, this sample is unlikely to be representative of the population. We therefore focus on the main survey when presenting the results. However, since we have a considerable sample size also in the pilot, we compare the two samples in terms of sample characteristics and selected results.

Representativeness of our net samples

- The net sample in the main survey is fairly representative for the Norwegian population in terms of gender and average age. The net sample in the pilot, on the other hand, has a vast majority of male respondents, and the average age is also somewhat higher than the national average. The net samples in both surveys have an overrepresentation of those who are employed, have high income or education, do not have children and live in Oslo or neighboring regions. This over-representation is more severe in the pilot sample.
- The main survey is more representative than the pilot when it comes to mode of transport. Compared to the National Travel Survey the main sample is somewhat overrepresented by public transport, while the pilot survey is overrepresented by private car driving and biking.
- Respondents who did not vote in the previous election are strongly underrepresented in both samples, compared to official election statistics. Among those who voted, the survey from the main sample has a slight over-representation of voters for left-wing and/or environmental parties. The pilot sample is more “polarized” as it has an over-representation of both voters who support an environmental party and voters who support a party labeled as populist (The Progress Party and the Industry and Business Party).

Results: Travel behavior and mode access

- The majority of pilot and main survey respondents own or have access to a car. However, household car ownership/access is slightly underrepresented in the main survey compared to the national average according to other sources.
- In the pilot survey, 72% of respondents use a private car for their reported daily trip. In contrast, 56% of the main survey respondents use a private car.
- Car is the dominant (more than 50%) mode share for workplace trips in both surveys.
- 13% of the main survey respondents, and 18% in the pilot, state they have no alternative transportation mode for their trip. Among private car and motorcycle/moped users who do have an alternative option, 63% of main survey respondents (53% of pilot) indicate that the alternative is “somewhat” or “much worse” than their usual mode.
- Slightly less than half of main and pilot survey respondents who use a private car pay road tolls on their daily trip according to the road toll calculator from AutoSync (formerly Fremtind Service). When asked what they pay in road tolls, respondents from the main survey tend to report higher tolls than what the calculator suggests (see Figure S 1).

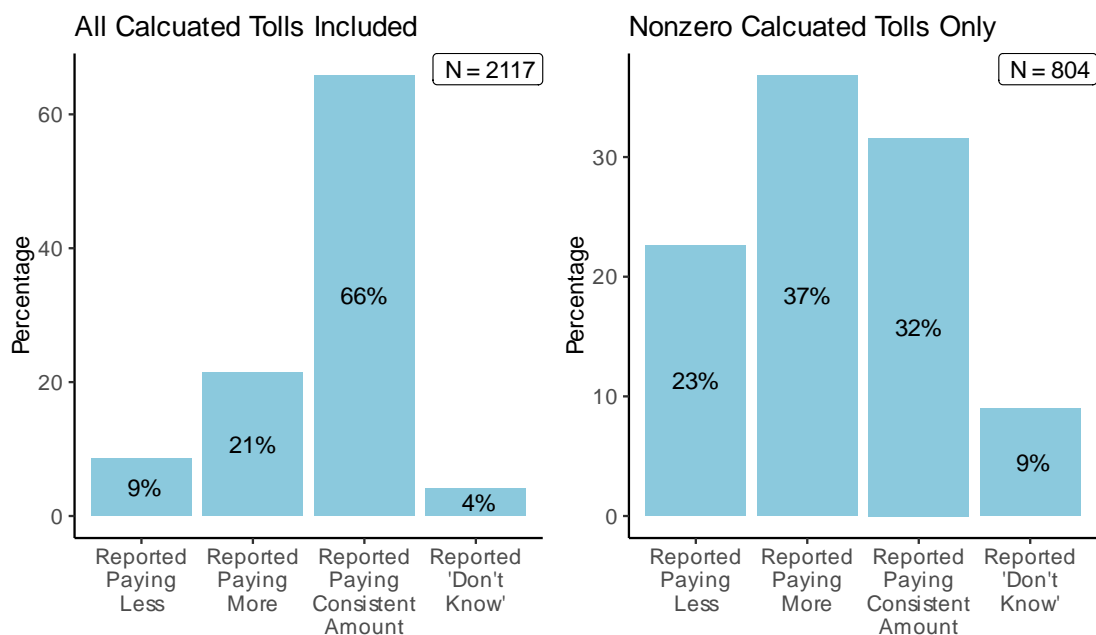


Figure S 1: Share of consistency in self-reported toll costs compared to calculated toll costs in the main survey, based on the road toll calculator from Fremtind Service. Car drivers only.

Results: Political views, attitudes toward inequality and trust

- There are large differences between the pilot and main survey regarding political views and attitudes, also when gender representation is considered.
- Concerning economic inequality, about half of the respondents think that Norway is a society where most people are in the middle of the distribution. When asked about how society should be, the vast majority want a society where most people are in the

middle or near the top. Those who vote for populist parties tend to think that society is more unequal.

- Concerning trust in institutions, the main survey respondents on average have higher trust in the respective institutions than the pilot survey respondents. Both survey samples tend to have relatively lower trust in politicians and higher trust in other authorities and institutions (see Figure S 2).

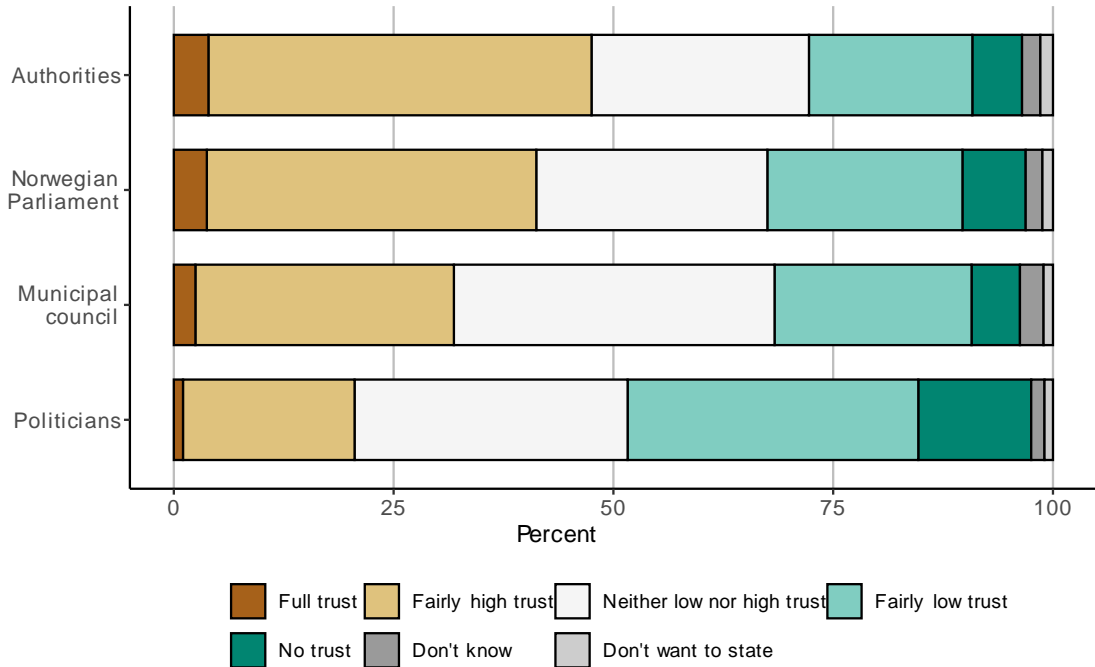


Figure S 2: Trust in institutions for the main survey.

Results: Attitudes toward transport pricing policies

- A considerable share of respondents does not think that road pricing will reduce traffic congestion problems, local air pollution and greenhouse gas emissions.
- The majority of respondents indicate that they believe people with low incomes will be most negatively impacted by road pricing.
- Many respondents are negative towards both universal road pricing and current road tolls. The share that is very or somewhat positive is slightly higher for road pricing than current road tolls (see Figure S 3). However, the share that is very negative is also higher. Men are more negative than women towards both policies.
- Those who vote for the populist party bloc indicate more negative attitudes towards both road pricing and the toll system, compared to respondents who vote for the other party blocs.
- Transport mode is strongly correlated with attitudes toward policies: car drivers are the least positive, while public transit riders, pedestrians and cyclists are more positive overall towards road pricing and road tolls.
- Those with lower education are more negative towards road pricing.
- Most respondents would prefer road pricing revenues to be spent on road investments, followed by investments in public transport, walking and cycling.

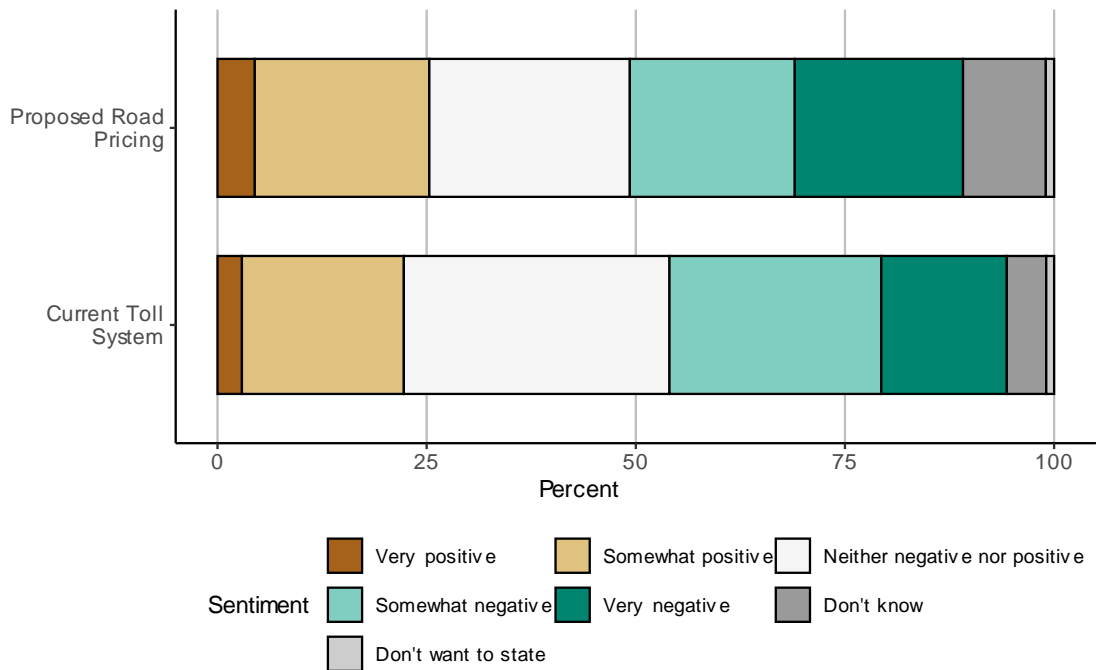


Figure S 3: Attitudes towards the road pricing proposal and the current toll system.

Conclusions

Our results suggest that opinions on road tolls and road tax reform are quite divided. Many respondents are negative towards both the current road tolls and universal road pricing, and do not expect road pricing to have positive effects. Respondents who for instance have low education, drive a car on their daily trip or vote for populist parties are more negative towards road tolls and road pricing. Given that these groups are somewhat underrepresented in our sample, opposition towards these policies in the population is likely to be somewhat stronger in the general population than in our results. However, there is also a large group of respondents who are undecided towards road pricing or road tolls, or do not know what their opinion is. Moreover, respondents are slightly more positive towards road pricing than the current road tolls. This is interesting given that about half of car drivers do not pay road tolls today, while everyone would have to pay something under universal road pricing.

Attitudes towards both road pricing and road tolls vary considerably by gender, education, travel mode and political party. Among car drivers, there is no clear tendency that those who pay high road tolls today are more in favor of replacing road tolls with road pricing. However, these findings are just bivariate correlations, not causal relationships. In future work, one should look more closely into causal explanations of support for or opposition against road pricing, and what this implies for the prospects of a road tax reform being successful. Interestingly, not all drivers seem to be aware of what they pay in road tolls, which could have implications both for travel behavior and public support.

We have also compared the characteristics of the net samples of the pilot survey and main survey. As pointed out above, the recruitment method of the pilot survey is unlikely to lead to a representative net sample. In terms of observable characteristics, those with high income and education and those who vote in elections are overrepresented in both net samples. On the other hand, the samples are quite different with respect to travel behavior and party support. This can only partly be explained by the fact that men are highly overrepresented in the net sample from the pilot survey.