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Fairness or Political Trust:

Public Acceptance towards Congestion Charge Policy in China

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Abstract: Public acceptance is a vital prerequisite for successfully implementing congestion charge policy all over the world, no except China. Numerous studies have attempted to understand what essential factors influence public acceptance formation, while less attention has been paid to the mechanism in China. Regarding perceived fairness and political trust, besides their positive effects on public acceptance, causality ambiguity exits between them in the mechanism of public acceptance formation. Based on a sample of 574 valid questionnaires from Beijing and Shanghai, this paper adopts the structural equation modeling approach to delineate the path map among psychological and social factors and public acceptance. I found a positive relationship between environmental concern, perceived fairness, political trust and public acceptance, while traffic inconvenience and car ownership have negative effects. By distinguishing procedural fairness and distributional fairness, there is a path of 'procedural fairness→political trust→distributional fairness' in public acceptance formation. These findings imply that practitioners should emphasize on putting the public back into the policy-making process of congestion charge, thus enhancing their trust in political institutions and improving public acceptance.

Key words: Public Acceptance; Perceived Fairness; Political Trust; Congestion Charge

1. Introduction

Congestion charge refers to a surcharge on people who travel in certain areas with private vehicles (Zheng et al., 2014). Usually speaking, congestion charge is viewed as a powerful tool for alleviating traffic congestion, already implemented in Singapore (1975), London (2003), Stockholm (2006) and Milan (2012). Chinese governments also have started to design the congestion charge policy and study the political feasibility of implementation for a long time, like Beijing, Shanghai, Shenzhen, Hangzhou and Nanjing. Whereas, public opposition soared even before the policy has been drafted. In an online opinion poll in Beijing, 61.4% of respondents disagreed with congestion charge policy[1].

Public acceptance is an essential prerequisite of congestion charge implementation, representing the legitimacy of policy design (Doelen, 1998), but less has been studied about the situation in China. Many cities failed to implement congestion charge policy because of public opposition (i.e. Edinburgh, New York) (Hensher & Li, 2013). Numerous studies have revealed the determinants of public acceptance towards congestion charge, rooted in behavioral and policy-related approach (Jakobsson et al., 2000; Kim et al., 2013; Schade and Schlag, 2000; Steg, 2003; Gärling et al., 2008). But these researches are all based on European or American cases, and less has been discussed about public acceptance towards congestion charge in China.

While scholars have shown that perceived fairness and trust in government agencies

[1] Source: http://finance.qq.com/a/20160603/012060.htm

would positively influence public acceptance, far less attention has been given to clarify the causality of political trust and perceived fairness in the mechanism of acceptance formation. On the one hand, some scholars stated high trust in government could improve people's fair perception, thus enhance their acceptance level (Kim et al., 2013). Whereas, some hold opinions that the assessment of fairness has a casual impact on respondents' trust for authority, and then improve their willingness to accept policy decision (Grimes, 2006).

In light of this literature gap and causality ambiguity, in this paper I use the data collected from Beijing and Shanghai in August 2016, to investigate the determinants of public acceptance towards congestion charge in China and the causality of political trust and perceived fairness in the mechanism of acceptance formation. Specifically, I aim to answer three research questions. First, what factors may influence public acceptance towards congestion charge in China? Second, besides their positive effects on public acceptance towards congestion fee, is there any causality between political trust and perceived fairness in the mechanism of public acceptance formation? Thirdly, if so, how is the influencing path among political trust, perceived fairness and public acceptance?

2. Literature Review

2.1 Prior studies on public acceptance towards congestion charge policy

Public acceptance is vital to the successful implementation of congestion charge all

over the world, many cities failed to carry out congestion fee because of public opposition, such as Hong Kong (1988), Edinburgh (2005) (Gaunt et al., 2007), New York (2007) (Schaller, 2010), Manchester (2008) and so on (Hensher & Li, 2013). Thus, many scholars have investigated the determinants of public acceptance towards congestion fee policy, mostly based on the cases in Europe or America (Jakobsson et al., 2000; Kim et al., 2013; Schade and Schlag, 2000; Steg, 2003; Gärling et al., 2008). Various factors have been tested in previous studies, and generally can be divided into two approaches, namely psychological (micro-level) approach and social (meso-level) approach (Jakobsson et al., 2000; Kim et al., 2013; Steg, 2003; Gärling et al., 2008; Taylor et al., 2010; Fujii et al., 2004; Francke and Kaniok, 2013).

Micro-level approach, rooted in psychology, argues that public acceptance towards congestion charge is influenced by mental factors such as environmental concern, problem awareness, social norms and so on (Fransson & Gärling, 1999; Schade and Schlag, 2000; Steg, 2003; Gärling et al., 2008; Jakobsson et al., 2000). Environmental concern is an attitude towards facts, one's own behavior or others' behavior with consequences for environment (Weigel, 1983; Ajzen, 1989; SjÎberg, 1989; Takala, 1991). Generally speaking, there is a positive relationship between environmental attitude and environmentally responsible behavior (Fransson & Gärling, 1999). Thus, the public who hold pro-environmental attitude are supposed to be more willing to accept congestion charge policy, for alleviating smog crisis. Especially, when people realize the urgency and importance of environmental problem, they will be more

support of related policies to solve this problem. More precisely, problem awareness includes three components, namely social problem awareness, self problem awareness and personal problem awareness (Schade and Schlag, 2000; Steg, 2003; Gärling et al., 2008). Scholars stated that social problem awareness has more effects on public acceptance towards congestion charge, as people realize social problems (air pollution, congestion etc.) caused by car use (Steg, 2003; Gärling et al., 2008). In addition, congestion charge, which intends to reduce car traffic, has a "social dilemma" when individuals' self-interest (driving comfortably) is in conflict with the collective's interest (abating smog pollution) (Dawes, 1980). Almost everyone would probably agree that traffic control is necessary, however, when facing an actual choice of policy acceptance, social norms, or expectation of others' car use reduction come into the foreground. Previous study has shown that expectation about others' car use reduction is another determinant of public acceptance towards congestion fee, clarifying the effect of social norms (Jakobsson et al., 2000).

Another more dominant approach, focusing on meso-level, debates over social factors as infringement on freedom, perceived effectiveness, perceived fairness, trust in government and socio demographic (Jakobsson et al., 2000; Kim et al., 2013; Bartley, 1995; Taylor et al., 2010; Fujii et al., 2004; Francke and Kaniok, 2013). In the scheme of congestion charge, individuals feel that they are giving up freedom by paying for something has been free before, thus, their acceptance level will decrease because of infringement on freedom (Jakobsson et al., 2000; Kim et al., 2013). Policy

effectiveness and fairness will no doubt be positive with public acceptance towards congestion charge. As congestion charge scheme is perceived effective to alleviate air pollution and traffic congestion, the public will be more likely to support it (Bartley, 1995; Taylor et al., 2010; Kim et al., 2013). Similarly, the acceptance level will increase, as individuals perceive congestion fee standard is fair and the majority can be benefit from this scheme (Schade, 2003; Jakobsson et al., 2000; Fujii et al., 2004). From previous studies, trust in government has also been viewed as an important determinant of public acceptance (Schmöcker et al., 2012; Kim et al., 2013). Scholars revealed that political trust has positive effect on both people's attitude towards government regulation and the level of compliance (Harring, 2013; Hammar et al., 2009; Jagers & Hammar, 2009). Especially, for regressive economic means (e.g. congestion fee), the effects of trust in government might be more important compared with perceived fairness or one's own individual interests (Tyler & Huo, 2002). Finally, socio demographic factors, such as age, gender, car ownership and driving frequency, have significant impact on public acceptance towards congestion charge (Francke and Kaniok, 2013).

What factors may influence public acceptance towards congestion charge in China? Although congestion fee policy hasn't been implemented in China, the governments in several large cities already begun to discuss the feasibility of congestion charge, such as Beijing, Shanghai, Guangzhou, Hangzhou and so on. Scholars have revealed that 46.26% of respondents in Hangzhou are willing to pay congestion fee during

peak hours, and the average amount of WTP per individual is 28.81 yuan per month (Shao & Liu, 2015). However, there is seldom study on essential factors influencing public acceptance towards congestion fee in China. Thus, this research intends to fill this gap by investigating the casual mechanism of various influencing factors and public acceptance of congestion charge in Beijing and Shanghai, also to test if the factors above can be applied to the situation of China.

2.2 Political trust and perceived fairness: how is the causality?

While previous scholars have discussed over the effects of psychological and social factors on public acceptance towards congestion fee, far less attention has been given to the causality of political trust and perceived fairness in the mechanism of acceptance formation. Numerous studies have shown that perceived fairness and trust in government can significantly increase public acceptance towards congestion charge (Schade, 2003; Jakobsson et al., 2000; Fujii et al., 2004; Schmöcker et al., 2012; Kim et al., 2013). Some scholars even stated that the effects of political trust on public acceptance might be related with perceived fairness, that is, high trust in government can improve people's fair perception, thus enhance their acceptance level (Kim et al., 2013). However, based on a study of land use policy, Grimes (2006) hold opinions that the assessment of fairness has a casual impact on respondents' trust for authority, and then improve their willingness to accept policy decision. So, besides their positive effects on public acceptance towards congestion fee, is there any causality between political trust and perceived fairness in the mechanism of public acceptance formation?

If so, how is the influencing path among political trust, perceived fairness and public acceptance? Is the path of political trust → perceived fairness → public acceptance or perceived fairness → political trust → public acceptance?

Political trust is defined as individual's basic evaluative orientation toward the government based on how well the government is operating according to people's normative expectations (Stoker, 1962; Miller, 1974). There are two broad theoretical approaches that compete to explain political trust: institutional and cultural (Mishler & Rose, 2001). Proponents of cultural approach view political trust as exogenous, origination from values and beliefs about people that are learned through early life socialization (Inglehart, 1997). But the institutional approach hypothesizes political trust is endogenous, arising from the extent to which political institutions produce desired outcomes (Prezeworski et al., 1996). From the institutional approach, previous studies stated that political trust derives from various source, such as satisfaction with national economy (Chanley et al., 2000), shared political sympathies with leaders (Anderson & Lo Tempio, 2002), political identity and so on (Jennings et al., 2001). Whereas, some scholars begun to emphasize the specifics of political decision formation process, revealing that perceived fairness in decision processes can affect citizens' assessment of political institutions (Hibbing & Theiss-Morse 2001; Grimes, 2001). Thus, procedural fairness, involving the public in policy-making process, might be a determinant of political trust, then enhancing public acceptance of policy decision.

Besides procedural fairness, perceived fairness also includes distributional fairness, relating with the distribution of costs and benefits within society (Eriksson et al., 2008; Schuitema et al., 2010). There are three principles in distributional fairness, namely equality, equity and need (Deutsch, 1975). For congestion charge policy, equality implies that each car-owner has the same obligation to pay for driving, whereas equity and need means certain groups' obligation can be exempted or reduced. The standards of congestion charge are consistent with equality principle around the world, not except the scheme under discussion in China. Thus, those who trust in government tend to perceived the distributional scheme (equality) as fair, and be more support of political institution's decision outcome (Kim et al., 2013).

Therefore, this research argues that the influencing path among political trust, perceived fairness and public acceptance depends on the specific concept of procedural fairness and distributive fairness. In other words, the influencing mechanism is procedural fairness → political trust → distributive fairness → public acceptance. The next section proceeds to discuss our conceptual model addressing this path map and causal mechanism.

3. Research Design and Data Source

3.1 Conceptual model and variable specification

Based on the above discussion, I adopt structural equation modeling (SEM) approach to delineate the path map among perceived fairness, political trust and public

acceptance. Figure 1 illustrates the conceptual framework.

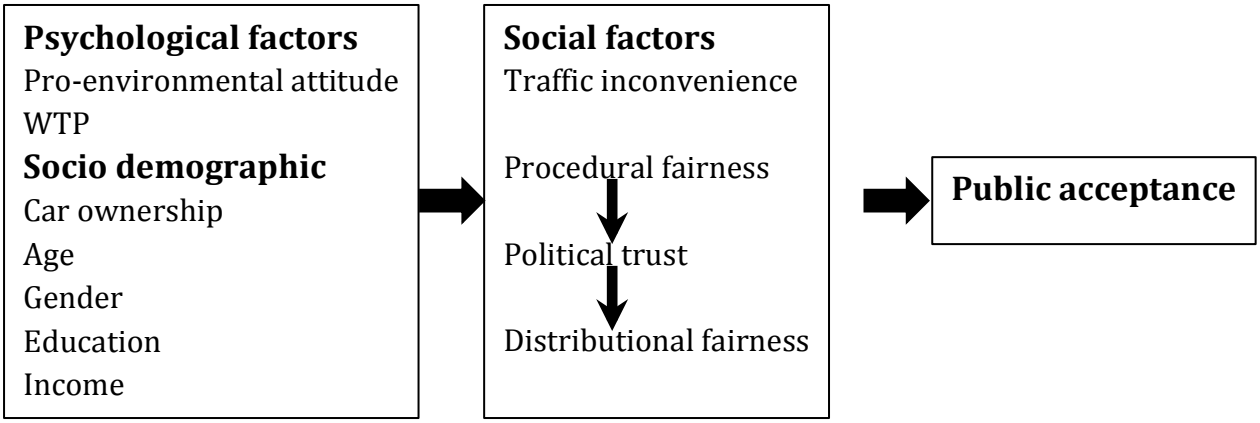


Figure 1 conceptual framework of public acceptance toward congestion fee

As shown in Figure 1, this conceptual framework contains four main sets. The first set (left column) is the psychological factors, that is, environmental concern. Previous studies have shown that there is a attitude-behavior gap of environmental concern, which means, those who hold pro-environmental attitude may not behave environmental friendly in life (Fransson & Gärling, 1999). Thus I adopt two variables to measure environmental concern, namely pro-environmental attitude and willingness to pay. Pro-environmental attitude is captured by a question in the survey "I think the environmental is not an important aspect in my life", while WTP is measured by asking, "How much money you are willing to pay for smog controlling". Besides their direct impacts on public acceptance, as psychological predictor of behavioral intention, environmental concern might also influence acceptance via perception of traffic inconvenience. That is, those who value more of environment will have lower perception of traffic inconvenience caused by congestion charge, thus

enhance public acceptance.

The second set of variables (middle column) is social factors including perception of traffic inconvenience, political trust, procedural fairness and distributional fairness. Among them, political trust and procedural fairness are latent variables, generated by various measurements via CFA (Confirmative Factor Analysis). Traffic inconvenience, partly representing infringement on people's freedom, is measured by the question 'smog controlling will bring traffic inconvenience to people's daily life'.

In previous studies, political trust all is captured with the question that 'how much do you trust in the government generally' or 'how much do you trust in the institution of … (specific name)', without differentiating different aspects of political trust. However, political trust is dimension-specific, such as integrity and competence, fairness and responsiveness, outcome and process, and so on (Citrin & Muste, 1999). Some studies have emphasized the distinction between politician's commitment to protect public interests and their competence to act (Li, 2012). Proceeding from previous literature, I measure political trust from several dimensions, such as the capacity (i.e. 'I think local government has the ability to solve smog crisis in the short time'), willingness (i.e. 'I think local government is willingness to control smog'), effectiveness (i.e. 'I think local government has implemented effective measures to control smog') and so on (Citrin & Muste, 1999; Li, 2012; Huang, 2015).

Procedural fairness relates to the way of policy introduced, whether there are fair and adequate methods for listening to citizens and involving them in decision-making

(Font & Blanco, 2007). Thus, openness ('I think the process of making smog control policy is open') and transparent ('I think the process of making smog control policy is transparent') of policy-making process are captured to delineate procedural fairness in the survey. Distributional fairness, following the literature (Jagers et al., 2010; Zannakis et al., 2015), is measured with the question of equality principle 'I think each car owner have the same obligation to pay congestion fee'. Besides these variables direct effects on public acceptance, there is a path of 'procedural fairness → political trust → distributional fairness → public acceptance'.

In addition to socio demographic factors as gender, age, income and education, I also take car ownership as an important control variable, measuring by 'How many cars do you have in your family'. Car ownership will not only influence public acceptance towards congestion charge directly, but also related with traffic inconvenience and distributional fairness. Finally, the last set of dependent variable is public acceptance, asking the respondents to judge the statement 'I support the government to carry out congestion charge policy to control smog pollution'.

Except socio demographic factors and WTP, the other questions all use Likert-scale item 1-5 (1-strongly disagree, 2-disagree, 3-netural, 4-agree, 5-strongly agree).

3.2 Data source

My empirical study was conducted in Beijing and Shanghai, the metropolis of China. As smog crisis in Beijing and Shanghai is very severe around the whole country, governments in both cities begun to discuss the feasibility of congestion charge. In

2013, Beijing Municipal Government announced the 2013-2017 Beijing Clear Air Action Plan, which mentioned that Beijing Municipal Commission of Transport, Beijing National Development and Reform Commission and Beijing Environmental Protection Bureau should study the political feasibility of congestion fee charge in the low emission area. One former official in Shanghai National Development and Reform Commission have stated that the study of congestion charge implementation started since 2007, and nowadays this policy has been advocated by National People's Congress deputy several times[2].

Thus, I adopted an online survey towards citizens living in Beijing and Shanghai for a long time in August 2016. A challenge to online surveys is ensuring that respondents pay sufficient attention to questions, so I judged the questionnaires' effectiveness according to the answering time (Huang, 2015). I dropped the subjects if the answering time is much less than expectation[3]. Finally, there are 574 valid questionnaires (285 from Beijing and 289 from Shanghai).

Among the 574 respondents, 49.30% was male (N=283) and 50.70% (N=291) was female. The age of participants was ranged from 14 to 69 years old, with a mean of 30 years old (i.e. 3.14% below 21, 62.54% between 21 and 30, 25.96% between 31 and 40, 5.75% between 41 and 50, 2.61% older than 50). In addition, 10 of the sample (1.74%) completed middle school or below, 34 respondents (5.92%) finished high school, 317 (55.23%) held college degree and 213 (37.11%) held postgraduate degree

[2] Source: http://business.sohu.com/20150203/n408382391.shtml

[3] According to the number of items in our questionnaire, we dropped the subjects if the answering time is less than 3 minutes.

or above[4]. Income per month was measured in yuan (RMB), the average of sample was between 7001 and 10000 (i.e. 3.14% below 2000, 5.75% between 2000 and 4000, 22.13% between 4001 and 7000, 20.73% between 7001 and 10000, 29.97% between 10001 and 20000, 18.29% above 20000). Nearly half of the sample (N=276) had no car, 41.81% had 1 car and 10.10% had 2 cars or more.

Table 1 Summary of sample socio demography (N=574)

Background		Frequency	Percentage (%)	Distribution of Beijing Population (%)	Distribution of Shanghai Population (%)
Gender	Male	283	49.30	50.18	51.50
	Female	291	50.70	49.82	48.50
Age	<21	18	3.14	3.90	4.87
	21-30	359	62.54	21.70	22.55
	31-40	149	25.96	18.50	17.59
	41-50	33	5.75	16.40	15.98
	>50	15	2.61	22.90	30.39
Income	<2000	18	3.14	3.00	3.50
	2000-4000	33	5.75	23.30	28.20
	4001-7000	127	22.13	27.95	27.85
	7001-10000	119	20.73	19.25	17.85
	10001-20000	172	29.97	18.70	16.90
	>20000	105	18.29	7.30	5.70
Education	Middle school or below	10	1.74	39.22	55.34
	High school	34	5.92	15.36	21.84
	College	317	55.23	38.61	20.91
	Masters or above	213	37.11	4.72	1.90
Car	None	276	48.08	74.72	86.01
	1	240	41.81	25.28	13.99
	>1	58	10.10		

[4] In our sample, the average of age and education tends to be younger and higher compared to that in whole Beijing, partly because online users usually will be younger and with higher education than the general. But online survey has become increasingly common in social science (Huang, 2015). Although the respondents were younger, better educated and have higher monthly income than the general population of Beijing and Shanghai, this group usually intends to be more politically active and more involved with the policy-making process, and hence merit particular attention.

4. Empirical Findings

4.1 Descriptive Statistics

Table 2 summarizes the descriptive statistics of all variables. Most respondents support congestion charge to alleviate smog pollution, with 33.4% of participants agreeing with the scheme and 9.91% strongly agreeing. Political trust is measured from 7 dimensions, that is, willingness to control smog, listening to the public's advice, individual's impact to influence decision-making, various measures to control smog, policy effectiveness, capacity to control smog in short and long time. Among them, political trust in government's capacity to control smog in long time is highest, with the mean of 3.30, while most people have low confidence in government's capacity in short time.

The distribution is similar between procedural fairness and distributional fairness. Most respondents hold a neutral attitude towards the openness and transparence of policy-making process, with the mean of 2.96 and 2.77 respectively. For distributional fairness, 32.35% of participants oppose the standards of congestion fee under discussion, and 23.13% hold neutral attitude.

As previous studies showed (Fransson & Gärling, 1999), there is a severe gap between pro-environment attitude and WTP. Almost 81.74% respondents agree or strongly agree that environment is an important aspect of their life, while only 56.52% are willing to pay no more than 100 yuan per month to control smog pollution. In

addition, few respondents thought that smog control policies would bring traffic inconvenience to their daily life, and the mean of this item is 2.43.

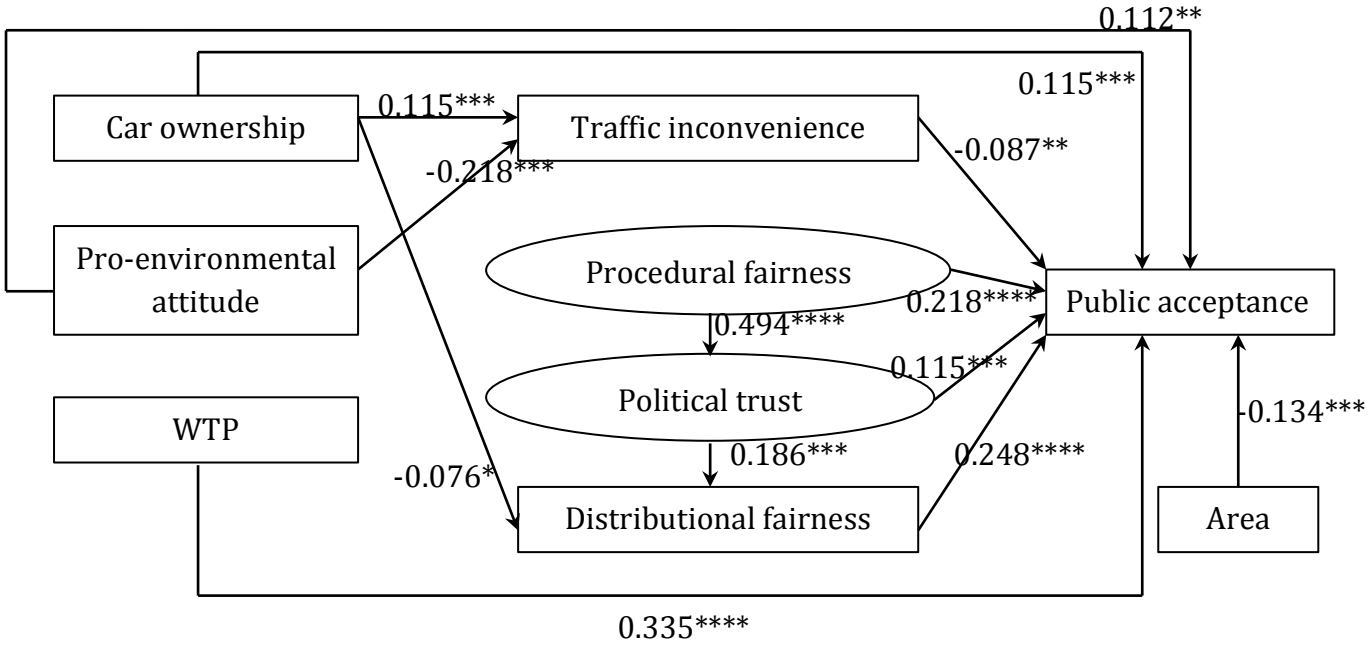
Table 2 the variables and descriptive statistics

Variables			Mean	Std. Dev.	Scale
Dependent variables	Public acceptance		3.16	1.14	1-5
Independent variables	Political trust	Willingness	2.97	1.11	1-5
		Advice	3.05	1.02	1-5
		Impact	2.57	1.06	1-5
		Various	2.76	1.01	1-5
		Effective	2.60	0.95	1-5
		Capacity short	2.35	1.01	1-5
		Capacity long	3.30	0.99	1-5
	Procedural fairness	Openness	2.96	1.10	1-5
		Transparence	2.77	1.03	1-5
	Distributional fairness		2.84	1.20	1-5
	Traffic inconvenience		2.45	1.04	1-5
	Pro-environmental attitude		4.14	0.98	1-5
	WTP		1.64	1.29	1-5
Control variables	Car		0.64	0.71	0-3
	Age		30.45	7.71	14-69
	Gender		0.51	0.50	0 or 1
	Education		3.27	0.65	1-4
	Income		4.27	1.37	1-7

4.2 SEM Results

What are essential factors to influence public acceptance towards congestion charge in Beijing and Shanghai? How is the path map among perceived fairness and political trust? To better delineate the causality among influencing factors and public acceptance, I employed Mplus (version 7.0) to estimate the path map illustrated in Figure 1. I adopted the weighted least squares means and variance adjusted (WLSMV)

for the estimation method, as this method provides accurate estimates and standard error in situation with a combination of continuous, binary and ordinal data (Flora and Curran, 2004). Figure 2 illustrates the path map among influencing factors and public acceptance towards congestion charge. Table 3 shows the standardized coefficients for the direct and total effects of independent variables on public acceptance, and the goodness-of-fit statistics for SEM model is illustrated in Table 4. All statistics, such as the Root Mean Square Error of Approximation (RMSEA), Confirmatory Fit Index (CFI), Tucker-Lewis Index (TLI, also known as Non-Normed Fit Index or NNFI) and Standardized Root Mean Square Residual (SRMR), have indicated a good fit for model.



Note: *p<0.1, **p<0.05, ***p<0.01, ****p<0.001

Figure 2 SEM results for impacts of factors on public acceptance

Effects of social factors on public acceptance

Those who think smog controlling might bring inconvenience to their daily life, tend

to oppose congestion charge policy significantly (β= -0.087, P-value<0.05, see Table 3). However, political trust and perceive fairness (procedural fairness & distributional fairness) have significantly positive effects on pubic acceptance. Besides direct impact on public acceptance (β= 0.081, P-value<0.1, see Table 3), political trust influence public acceptance significantly through enhancing distributional fairness (β= 0.046, P-value<0.001, see Table 3). This path verifies my hypothesis that those who have high confidence in political institution, tend to agree with the distributional principle adopted by this institution. In addition, if people think the policy-making process is open and transparent, they would improve their trust in government agencies (β= 0.494, P-value<0.001, see Figure 2), and their political trust also can enhance the agreement of distributional principle (β= 0.186, P-value<0.001, see Figure 2). As I supposed before, there exit a path of 'procedural fairness→political trust→distributional fairness', finally improving public acceptance (β= 0.023, P-value<0.01, see Table 3). Distributional fairness also has significantly positive effects on public acceptance directly (β= 0.248, P-value<0.001, see Table 3).

Effects of psychological factors on public acceptance

As Figure 2 shows, environmental concern – pro-environmental attitude and WTP – have significant positive relationship with public acceptance towards congestion fee (Attitude: β= 0.131, P-value<0.01, WTP: β= 0.338, P-value<0.01, see Table 3). Consistent with previous findings (Fransson & Gärling, 1999), environmental concern is an important predictor of people's behavior, thus, those value more of environment

tend to behavior more environmental friendly, like reducing car use. However, the effect of WTP on public acceptance is stronger than pro-environmental attitude, which can be indicated from the attitude-behavior gap shown in descriptive statistics. Especially, pro-environmental attitude influence public acceptance through traffic inconvenience, that is, those who hold pro-environmental attitude tend to not think smog controlling would bring traffic inconvenience to daily life, thus enhance their support of congestion charge (β= 0.019, P-value<0.05, see Table 3).

Effects of socio demographic on public acceptance

Car owners tend to oppose congestion charge, as they are the target audience of this policy (β= -0.204, P-value<0.05, see Table 3). What's more, car ownership influences public acceptance via traffic inconvenience and distributional fairness respectively. Those who have car are supposed to agree that smog controlling might bring traffic inconvenience and oppose the distributional principle, and then decrease their acceptance level (Via traffic inconvenience: β= -0.010, P-value<0.1, Via distributional fairness: β= -0.019, P-value<0.1, see Table 3). Citizens in Shanghai express more opposition towards congestion charge, might because smog crisis is less severe in Shanghai and they think it's nor necessary to implement congestion charge for smog controlling. However, other socio demographic factors, such as age, income, gender and education, don't have significant relationship with public acceptance.

Table 3 standardized coefficients for the direct and total effects

	Total effects	Direct effects	Indirect effects	Via
Political trust	0.127***	0.081*	0.046****	Distributional fairness
Procedural fairness	0.280****	0.218****	0.040*	Political trust
			0.023***	Political trust→distributional fairness
Distributional fairness	0.248****	0.248****	-	-
Traffic inconvenience	-0.087**	-0.087**	-	-
Pro-environmental attitude	0.131****	0.112***	0.019**	Traffic inconvenience
WTP	0.338****	0.335****	0.003	Traffic inconvenience
Car	-0.233****	-0.204****	-0.010*	Traffic inconvenience
			-0.019*	Distributional fairness
Gender	-0.025	-0.025	-	-
Age	0.029	0.029	-	-
Income	0.034	0.034	-	-
Education	0.014	0.014	-	-
Area	-0.134***	-0.134***	-	-

Table 4 Goodness-of-fit statistics of the model

Goodness-of-fit measures	Model
Degrees of Freedom (d.f.)	120
Chi-square test of model fit	407
RMSEA	0.64 (90% C.I.: 0.058, 0.071)
CFI	0.896
TLI	0.860
SRMR	0.071

5. Conclusions and Policy Implications

For better alleviate smog pollution and traffic congestion, congestion charge policy has been widely discussed in China, and various level of Chinese governments intend to carry out this scheme. However, public oppositions soared even before the policy has been drafted. In an online opinion poll, 61.4% of respondents in Beijing disagreed with congestion charge policy[5]. Especially, car owners stated that it is unfair to take congestion charge when car owners had already paid fuel tax and parking fee. To them, it should be the government's duty to develop public transportation system rather than charging car owners. Thus, public acceptance is vital to implement congestion fee policy, representing the legitimacy of policy design.

In this paper I contributed to the growing body of literature on factors influencing public acceptance towards congestion charge in China and their path map. Using data derived from Beijing and Shanghai in August 2016, I constructed a structural equation model to examine the role of psychological and social factors on public acceptance. The research findings suggest that environmental concern – pro-environmental attitude and WTP – have significant positive relationship with public acceptance towards congestion fee directly and indirectly, especially WTP. Thus, for successful implementing congestion charge policy, it's necessary to improve the public's environmental concern by various actions, such as environmental education, propaganda and so on.

[5] Source: http://finance.qq.com/a/20160603/012060.htm

The SEM results delineate the path road between perceived fairness and political trust in the mechanism of public acceptance formation. Distinguishing by procedural fairness and distributional fairness, I try to clarify the causality of perceived fairness and political trust. The path shows that the openness and transparency of policy-making process might enhance people's trust in government agencies, thus agree with the distributional principle adopted by the government and support congestion charge. This finding indicates the importance and urgency of putting the public back into the governance. Recently, more and more scholars have stated involving the public in the policy-making process is a potent means to achieve key democratic values as legitimacy, justice and effectiveness in governance (Fung, 2003 & 2015). Practitioners should consider designing various mechanisms to engage citizens, then improving political trust in society.

However, the external validity of findings remains doubtful, as the data only contains a sample of 574 captured from Beijing and Shanghai. Yet the questionnaire just tests respondents' subjective attitude, willingness or opinion, but not their actual behavior. Further exploration is valuable, to enlarge the sampling cities in China and trace their actual behavior through longitudinal data. Nevertheless, my research sheds light to part of the mechanism of public acceptance formation, providing practical implication for policy makers to implement congestion charge in the future.

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