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Does social trust increase willingness to pay taxes to improve public healthcare? Cross-sectional cross-country instrumental variable analysis

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ABSTRACT

The purpose of this paper is to investigate the effect of social trust on the willingness to pay more taxes to improve public healthcare in post-communist countries. The well-documented association between higher levels of social trust and better health has traditionally been assumed to reflect the notion that social trust is positively associated with support for public healthcare system through its encouragement of cooperative behaviour, social cohesion, social solidarity, and collective action. Hence, in this paper, we have explicitly tested the notion that social trust contributes to an increase in willingness to financially support public healthcare. We use micro data from the 2010 Life-in-Transition survey (N = 29,526). Classic binomial probit and instrumental variables ivprobit regressions are estimated to model the relationship between social trust and paying more taxes to improve public healthcare. We found that an increase in social trust is associated with a greater willingness to pay more taxes to improve public healthcare. From the perspective of policy-making, healthcare administrators, policy-makers, and international donors should be aware that social trust is an important factor in determining the willingness of the population to provide much-needed financial resources to supporting public healthcare. From a theoretical perspective, we found that estimating the effect of trust on support for healthcare without taking confounding and measurement error problems into consideration will likely lead to an underestimation of the true effect of trust.

1. Introduction

There is growing debate about the role of social trust and its influence on population health and the healthcare system. Social trust has been found to be positively associated with improved self-reported health status, subjective well-being, and mental health (Yip et al., 2007; Åslund et al., 2010; Kim et al., 2011). It is also positively associated with a healthy lifestyle, a lower mortality rate, and higher fertility (Veenstra, 2002; Takakura, 2011; Yamamura and Antonio, 2011).

One of the most frequent explanations for the positive outcomes associated with higher trust is that trust may strengthen willingness to support public healthcare services by encouraging cooperative behaviour, social cohesion, social solidarity, and collective actions (Kawachi et al., 1997; Kim and Kawachi, 2007; Kim et al., 2011). In this way, trust may consolidate popular support for public healthcare insofar as individuals who exhibit higher levels of trust may be more willing to support public healthcare than individuals with relatively lower levels of trust.

In light of this evidence, we focus on the link between trust and the willingness to pay more taxes (WTPT) to improve public healthcare in post-communist countries. To the best of our knowledge, this study is the first study to examine the direct effect of trust on the willingness to pay more taxes to improve public healthcare. Drawing on a survey of 29 post-communist countries, we attempt to shed light on the influence of trust on the WTPT for healthcare by asking the questions: Are individuals with higher levels of trust more willing to pay more taxes to improve public healthcare? Does confounding bias and measurement error distort the true effect of trust by underestimating its effect on the willingness to financially support healthcare? How does the probability

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of the WTPT fluctuate depending on changes in social trust?

The answers to these questions will contribute to two strands within the literature. On the one hand, it will contribute to the literature on support for public healthcare (Donelan et al., 1999; Bleich et al., 2009; Footman et al., 2013). Understanding the extent of support that the population provides to public healthcare is critical because healthcare is ultimately paid for by the population as a whole. In the long run, public healthcare is sustainable only if citizens are willing to contribute their taxes towards financing it (Thomson et al., 2010; He, 2016). Consequently, identifying the factors that influence the WTPT for public healthcare currently stands at the centre of political discussion and health research (Footman et al., 2013; Missinne et al., 2013). Thus, Gevers et al. (2000) used the 1996 round of the Eurobarometer survey that was conducted in 13 countries of the European Union and highlighted the role of individual characteristics such as gender and education in explaining support for public healthcare. In turn, Wendt et al. (2010) used the 2002 round of the Eurobarometer survey, and suggest that specific features of the healthcare system - and most specifically the percentage of private copayments for healthcare - is an important factor that influences support for healthcare. Naumann (2014) expanded the sample to the 1996, 1998, and 2002 rounds of the Eurobarometer survey and pointed to political ideology as one of the main factors associated with support for public healthcare.

Our study is different from the above-discussed literature in four primary ways. First of all, as mentioned above, one of the most frequent explanations for the positive outcomes of higher levels of trust on health status, mortality, fertility, subjective well-being, and mental health is that trust may have a positive effect on support for the public healthcare system by encouraging cooperative behaviour, social cohesion, social solidarity, and collective actions (e.g. Kawachi et al., 1997; Kim and Kawachi, 2007; Kim et al., 2011). Hence, the assumption is made that higher levels of social trust are associated with higher levels of financial support for the public healthcare system, and that an improved healthcare system will have positive effects on the health of the population. This assumption is frequently mentioned in the research literature but has not yet been studied empirically. Consequently, this assumption is problematic unless it is properly tested and confirmed empirically. As far as we know, this is the first study that aims to empirically test the association between social trust and the willingness to contribute more financially towards improving public healthcare.

Second, previous studies operationalized support for public healthcare by making statements such as “The government or social insurance should only provide everyone with essential services, such as care for serious diseases, and encourage people to provide for themselves in other respects”. Disagreement with this statement was interpreted in previous studies as marking a willingness to provide support for public healthcare (Gevers et al., 2000; Wendt et al., 2010; Naumann, 2014). Agreeing or disagreeing with this statement, however, can hardly be interpreted as an indicator of direct willingness to pay taxes to fund public healthcare. As a result, the findings of these studies were unable to identify the actual degree of support for public healthcare that individuals were willing to provide by paying a larger share of their income to taxes (Aizuddin et al., 2012). In contrast, our study uses a direct question about the individual's willingness to pay taxes to improve public healthcare as the outcome variable. Using the WTPT question allows us to directly gauge people's readiness to contribute a larger share of their income to support public healthcare.

Third, previous studies used relatively outdated data from a homogenous sample of developed countries that are members of the European Union. In contrast, our study uses data from a diverse sample of 29 post-communist countries collected in 2010. Specifically, our sample covers not only the more developed post-communist countries of Eastern Europe, but also countries of the Caucasus, Central Asia, the Balkans, and Mongolia, all of which were under-investigated by the previous studies. In addition, due to its multi-country sample, this study provides a rigorous test regarding the universality of associations between the WTPT to finance public healthcare, and the factors that may influence it.

Finally, the previous studies were based on classic single-stage regression, which is prone to confounding and measurement error problems. These problems can lead to the underestimation or overestimation of the true effect of trust on the WTPT for public healthcare. In contrast, this study used both classic single-stage and instrumental variable regression. Using instrumental variable regression increases our confidence that our findings are not artefacts of problems with confounding and measurement error.

On the other hand, this study contributes to the strand of the literature which focused on trust and public healthcare in post-communist countries. Understanding the influence of trust on the WTPT for public healthcare in post-communist countries is important since the transition from centrally-planned to market economies has been associated with significant reductions in public healthcare funding (McKee, 2004; Leive, 2010). Chronic underfunding of public healthcare has led to critical shortages in modern technology and drugs, and deficiencies in knowledge about contemporary evidence-based interventions and practices (Figueras et al., 2004; Rechelm et al., 2014). Underfunding has resulted in sharp increases in formal and informal out-of-pocket payments and significant inequalities in access to healthcare (Stepurko et al., 2015; Habibov and Cheung, 2017). Underfunding has also contributed to a significant reduction in the quality of public healthcare services (Habibov, 2016). Such underfunding of public healthcare is especially alarming given the fact that transitional processes were accompanied by considerable increases in the levels of cardiovascular diseases, premature mortality, morbidity, as well as alcohol and tobacco consumption, and poor diet (Safae, 2012). Under these circumstances, it has become critical to better understand the factors, such as social trust, that may help consolidate popular support for the funding of public healthcare (Aizuddin et al., 2012; He, 2016).

The development of social trust in post-communist countries has also been significantly distinct from its development in democracies. Paldam and Svendsen (2000a, 2000b) advance the “dictatorship theory of missing social capital” that postulates that authoritarian regimes, including communist regimes, have historically functioned to undermine social trust. Traps (2009) agrees, and substantiates his argument by providing evidence that communist governments actively encouraged both fear and mistrust among society members. As such, as the transition out of communism began, post-communist countries experienced substantially lower levels of social trust than did developed democracies (Horne, 2014; Sarracino and Mikucka, 2017). Following the collapse of communism, rising levels of poverty and income inequality, organized crime and corruption, and rising levels of nationalism have resulted in even lower levels of social trust (Mungiu and Krastev, 2004; Slay, 2009). It is for these reasons that the significant gap in social trust continues to exist between developed democracies and post-communist countries (Raiser et al., 2001; Sapsford et al., 2015). Furthermore, the 2008 global financial crisis has also had major negative effects, furthering lower levels of social trust in post-communist countries (Habibov and Afandi, 2015).

Unfortunately, there is a shortage of current studies on the effects of trust on the WTPT for public healthcare in post-communist countries. However, it must be highlighted that studies in the