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Income comparisons and attitudes towards foreigners - Evidence from a natural experiment

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ABSTRACT

We exploit a natural experiment related to the German re-unification to address whether disutility from income comparisons affects attitudes towards foreigners. Our empirical approach rests upon East German individuals with West German relatives and friends. We use the exogenous variation of wealth of West Germans shortly after the fall of the Berlin Wall as an instrument to identify the effect of disutility from income comparisons on East Germans' attitudes. We find robust evidence that East Germans express more negative attitudes towards foreigners, particularly from low-wage countries, if they worry about their economic status compared to better-off West Germans.

1. Introduction

The discussion on liberalizing or restricting immigration is of high political relevance in the US, Europe, and many other countries. Economic implications of immigration on the domestic population, particularly the perceived effects on income inequality and social status concerns, dominate political campaigns. Understanding attitudes over immigration is, therefore, gaining interest to scholars and policymakers. In this paper, we address the effect of (upward) income comparisons on attitudes towards foreigners. We show that people express more negative attitudes towards foreigners if they worry about their economic status compared to a better-off reference group. Our analysis also reveals that this adverse effect of upward income comparisons is more pronounced towards foreigners stemming from low-wage countries. We interpret our findings as identifying a source of xenophobic attitudes: distress from income comparisons.

Assessing the role of income comparisons for attitudes and behavior has gathered growing interest in recent years in economics. Several economists have adopted the idea that people are not only motivated by the *absolute* level of income, but rather by the *relative position* in comparison to others in one's reference group.[2] The primary tenet of this literature is that individuals derive disutility when they do less well than members of their reference group. Empirically, the importance of those comparisons is confirmed in explaining, for example, happiness (Luttmer, 2005; Ferrer-i-Carbonell, 2005; Clark et al., 2008), health (Eibner and Evans, 2005; Pham-Kanter, 2009; Balsa et al., 2014), job satisfaction (Card et al., 2012a), migration (Stark and Taylor, 1991; Hyll and Schneider, 2014), or effort at the workplace (Dur and Glazer, 2008; Gaechter and Thoeni, 2010; Cohn et al., 2014).

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[2] As early as half a century ago, Duesenberry (1949) and Festinger (1954) pointed out that individuals routinely compare their incomes to others. The idea that relative income impinges on welfare dates back at least to Veblen's theory of conspicuous consumption (1899).

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Disentangling the effect of income comparisons on attitudes and behavior is – besides data limitations – deterred by one major conceptual concern, i.e. the endogeneity of incomes to which one compares. *First*, incomes are not necessarily exogenous since a person deliberately choses his or her place in social space, i.e. its reference group (Falk and Knell, 2004; Clark and Senik, 2010). To *whose* income someone compares might be driven by positional concerns; people might cut existing or establish new personal ties in order to improve their social rank. *Second*, even within a fixed reference group incomes are not necessarily exogenous since one's social network affects one's income as well as the income of the other network members. According to the most documented channel, well-established social networks might enhance labor market matching and thus market earnings (Schmutte, 2015; Dustmann et al., 2016). A promising strategy to deal with the problem of endogenous income comparisons relies on laboratory or field experiments. In three recent seminal experimental studies addressing the effect of fair wages on effort provision at the workplace, participants were randomly assigned to work-groups treated differently in terms of (perceived) relative wage (Gaechter and Thoeni, 2010; Cohn et al., 2014; Breza et al., 2017). The experiments showed that the behavioral outcome variable of work effort is causally affected by income comparisons. However, concerning other outcome categories, e.g. health or political attitudes, these convincing experimental designs can hardly be adopted since the time span of treatment seems to be too short to obtain plausible findings.

For testing the effect of distress arising from unfavorable income comparisons on attitudes towards foreigners, we take advantage of a ‘natural’ experiment, namely the division and reunification of Germany.[3] More specifically, our empirical approach rests upon individuals from the German Democratic Republic (GDR), who have a West German reference group. We use the variation of wealth of West German relatives and friends shortly after the breakdown of the communist system to identify the effect of distress on attitudes towards foreigners among *East* Germans. In particular, we apply an IV approach where attitudes towards foreigners are explained via the distress someone experiences from upward income comparisons to West German relatives and friends. This distress, in turn, is instrumented by the relative wealth gap compared to the better-off West German reference group. Strictly speaking, we instrument a person's psychological burden of income comparison by the relative wealth gap that person is facing.

The specific historical situation in 1989/90 provides a unique setting for addressing the mentioned major obstacles in testing the effect of income comparisons on attitudes. With respect to the *first* problem of self-selected reference groups, we argue that the existence of relatives and friends of East Germans living in West Germany were *not* determined by income-related considerations. East Germans lived in a radically different and closed economic system with different relative prices, different goods and qualities, an unconvertible currency, and almost no chance of moving or even visiting the other side of the Wall. Thus, economic comparisons between East and West Germans have rather been unfeasible, and, equally important, speculative comparisons have not been of major relevance for East Germans. Further note that in the GDR, as well as in West Germany, the German division was believed to be permanent. Even in the summer of 1989, no one expected the breakdown of the communist system or the German re-unification. Thus, until the fall of the iron curtain, West Germans did not belong to the relevant social space of East Germans causing distress. Consequently, East Germans did not adjust their West German contacts to improve their relative economic position. Note that this reasoning is very much in line with the theory of relative deprivation, which predicts that individuals will be influenced adversely in life satisfaction and behavior if they do less well than members of their reference group. Runciman (1966) formulated the following conditions for relative deprivation to hold: an individual senses relative deprivation if he or she does not have X, knows other individuals who have X, wants X, and believes having X is feasible. Since the “feasibility condition” was not fulfilled during the German separation, individuals could not be deprived from unfavorable comparisons to their West German reference group. But that situation dramatically changed by the unpredicted fall of the Wall and the subsequent adoption of the West German economic system in 1990. All of a sudden visiting West Germans was possible without difficulty. More importantly, both parts of Germany now shared one labor market, one currency, and one welfare state. As a consequence, West Germans entered East Germans’ reference groups.

With respect to the *second* mentioned difficulty, we can rule out that significant social network effects could have affected one's income position. Neither West Germans benefited from contacts to their East German relatives and friends, nor did East Germans perform better on the GDR labor market due to their social ties to West Germany. Thus, the social network effects typically affecting labor market outcomes in a single economy did not work across either the German border or across economic systems. From an East German's point of view, whether West German friends or relatives had acquired a high standard of living or not during the period of Germany's division was a matter of chance. Consequently, the confrontation with different levels of higher incomes caused by an unexpected enlargement of one's reference group can be considered as an exogenous treatment.

We advance the existing literature in several respects. First, we link income comparisons to attitudes towards foreigners and propose an alternative economic explanation for xenophobic feelings, namely adverse repercussions on the relative economic status of individuals. Second, the historical setting of our empirical analysis allows us to apply an IV approach addressing the endogeneity of distress from income comparisons. Third, our data set enables us to determine the social group to which someone compares, to observe the disutility a person experiences from income comparisons and to assess the relative income status compared to one's reference group. Finally, we contribute to the growing empirical literature on the economic relevance of social concerns but in a different way. Whereas most previous papers focus on observational data and few rely on lab or field experiments, we provide evidence generated by a natural experiment.

[3] For other empirical papers using German separation and reunification in a quasi-experimental setting, see Alesina and Fuchs-Schuendeln (2007), Kern and Hainmueller (2009), Burchardi and Hassan (2013), Hyll and Schneider (2013), Heineck and Süssmuth (2013), Hennighausen (2015) and, recently, Bursztyn and Cantoni (2016), as well as Fuchs-Schuendeln and Masella (2016).