

# The day after Charlie. Terrorism, Trust and Well-being of Muslims in Europe

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## 1 Overview of the project

In this project we study the causal impact of terrorism on (1) attitudes towards immigrants, (2) trust and (3) well-being of Muslim immigrants in the host society. To this aim, we exploit the timing and the exogeneity of the terrorist attacks occurred in Europe during 2015, in a difference-in-differences design.

Terrorism is a psychological warfare used by individuals or sub-national groups against noncombatants to obtain political, religious, or ideological objectives by intimidating a large audience and by influencing individuals' emotions and attitudes (Friedland and Merari, 1985; Enders and Sandler, 2000). The economic consequences of terrorism are well-known. They concern, among other things, damaged infrastructure, output losses, security costs (Meerrieks and Gries, 2013), reduced GDP growth (Abadie and Gardeazabal, 2003) and reduced efficacy of financial markets (Chen and Siems, 2004). However, the consequences of terrorist attacks are specifically designed to go far beyond the deaths and the direct losses they cause. These costs include the psychological, social and political effects upon the population that are generated by the climate of fear that the attacks evoke and that are partly inflated by the extensive media coverage that terrorist attacks attract (Metcalf et al., 2011; Romanov et al., 2012; Hole and Ratcliffe, 2015).

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The main feature of a terrorist attack, its randomness, causes people to be distressed even if they were not on the site where the attack was perpetrated and even if they knew nobody caught up in it. This feeling is even more accentuated when to strike is an enemy that comes from within. The challenge, therefore, is to understand how societies and individuals respond to the threat.

Terrorist attacks crucially influence individuals' risk assessments and their willingness to trade off security for liberties (Bozzoli and Müller, 2011). Moreover, this increased perception of risk, affects how people view other groups, especially the groups which the terrorist belong to (Bar-Tal and Labin, 2001; Huddy et al., 2005; Echebarria-Echabe and Fernández-Guede, 2006; Hanes and Machin, 2014). Strong empirical evidence supports the idea that attacks are likely to induce a backlash against minorities, a rise in their costs of assimilation with resulting effects in terms of their health outcomes and economic prospects (Gould and Klor, 2015; Åslund and Rooth, 2005; Gautier et al., 2009; Johnston and Lordan, 2012; Cornelissen and Jirjahn, 2012; Hanes and Machin, 2014; Schüller, 2015). Furthermore, terrorism affects confidence, in general, and confidence in governments and in institutions, in particular (Blomberg et al., 2011).<sup>1</sup> If the reduction in confidence comes exactly from the fact that terrorist attacks, especially in Europe, have been perpetrated by people coming from inside, the reduction in confidence in governments and institutions is usually supported by the claim that “they have not done enough”. These responses, and the sensation of uncertainty they bring with them, have a great impact in terms of well-being.

A very small body of literature have studied the relationship between terrorism and well-being. Moreover, with the exception of Hole and Ratcliffe (2015), this literature has mainly focused on the well-being of natives and has usually found a negative correlation between terrorism and well-being (Frey et al., 2009; Metcalfe et al., 2011; Clark and Stancanelli, 2016; Coupe et al., 2016). In this paper we rather focus on the well-being of immigrants, either first or second generation and, specifically, of Muslim immigrants. Following Gould and Klor (2015), we claim that, since Islamic terrorism induces a backlash against the Islamic community in the targeted country, it crucially affects the well-being of Muslim immigrants with potential long lasting effects in terms of integration in the host country. In fact, in the aftermath of terrorist attacks, people are loath to make social connections especially with people belonging, or being supposed to belong, to the group of the “unknown enemy”. This, in turn, increases social fragmentation and reduces well-being.

Our research advances the current literature in several respects. Firstly, we exploit the richness of the data-set, containing individual-level informa-

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<sup>1</sup>Note that (Dinesen and Jæger, 2013) found a positive effect of the Madrid bombings on trust in institutions.

tion on the religion of the respondent to estimate the causal impact of terrorism on the well-being of immigrants, and, in particular, of Muslim immigrants. Our focus on countries that have not been directly affected by terrorist attacks allows us to reduce the confounding effect coming from the fact that often terrorism rises and explodes in poverty, social exclusion and fragmented societies (Piazza, 2006; Azam and Thelen, 2008). Second, as in Hole and Ratcliffe (2015), our empirical specification builds on Lechner et al. (2011) to account for the order data of our dependent variable when estimating the treatment effect with difference-in-differences. More specifically, we analyze the treatment effect in terms of the response probability, and we assume common trends at the level of the latent index. Third, we make use of two different data-sets, a panel and a repeated cross-section, and we apply propensity score matching and regression discontinuity design techniques as a robustness check of our findings using panel data. Fourth, beyond the estimation of the main average treatment effect, we seek to investigate a set of heterogeneous effects across levels of neighborhood poverty, ethnic diversity and initial level of integration.

## 2 Data and methods

We make use of two data sources. First, we exploit the longitudinal nature of the Internet Studies for the Social sciences (LISS) consisting of 4500 households, comprising 7000 individuals. The panel is based on a true probability sample of households drawn from the population register by Statistics Netherlands. Households that could not otherwise participate are provided with a computer and Internet connection. The core longitudinal study is repeated yearly since 2007 and is designed to follow changes in the life course and living conditions of the panel members. Second, we exploit the richness of the World Value Survey (WVS), a compilation of surveys conducted in more than 80 countries representing about 85 percent of the world's population. Both surveys contain, among several others, questions on religion and religiosity, trust, attitudes towards immigrants, life satisfaction and well-being and are therefore suitable for the analysis we aim to conduct in this project.

Our empirical strategy exploits the exogeneity of the terrorist attacks occurred in Europe. More specifically, we make use of the difference-in-difference estimator, propensity score matching techniques and regression discontinuity design in order to corroborate our findings. Moreover, with a methodological innovation with respect to existing literature, we build on Lechner et al. (2011) to account for the order data of our dependent variable when estimating the treatment effect.

### 3 Project Development

Valentina Rotondi defended her Ph.D thesis in February 2016 and she is currently post-doc research fellow at Politecnico di Milano and research associate at the Laboratory for Comparative Social Research, Higher School of Economics (Moscow). In her dissertation she has used both econometric techniques and experimental methodology. As her specialization is mainly methodological, she has developed a propensity to challenge herself in different fields. Her first contributions are in the analysis of cooperative crimes with a special focus on corruption (Rotondi and Stanca, 2015). Lately, she has been engaged in a series of projects on risk aversion (Attanasi et al., 2016), insurance behavior and technology adoption with a special focus on developing countries (Bonan et al., 2015; Falco et al., 2016). One of this studies has recently received financial support from the Fondazione Roberto Franceschi. Recently, she has turned her attention on radical Islam (Falco and Rotondi, 2016) and well-being (Colombo et al., 2016). The project presented here is a follow up of her previous work.

The project will develop under the supervision of Luca Stanca who is Full Professor at the economic department of the University of Milan-Bicocca and a member of the FRF Network and of Emilio Colombo who is Full Professor at the department of Social and Political Sciences at the Catholic University of the Sacred Heart in Milan. Luca, Emilio and Valentina have already and successfully worked together on well-being. They have complementary skills and are always open to new and interesting research opportunities.

The FRF Young Professional Grant would be particularly suitable for Valentina at this stage of her scholarly career, as she would have the possibility to exclusively focus on this challenging and multidisciplinary research project with important policy implications and with potentially good publication opportunity. Valentina's contract will expire in February 2017 and she will be happy to start the project immediately after. She would be glad to spend some time at the Dondena Centre at Bocconi University since she's willing to participate in its excellent and stimulating working environment which she would greatly benefit from. However, if this would not be feasible, we may have alternative ways to host Valentina in Milan either at University of Milano Bicocca or at Catholic University of Milan.

The project will be the result of a close collaboration between the Valentina and the supervisors and will generate at least one research paper to be presented in international conferences and ultimately published in a peer-reviewed international journal.

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