Financial Schemes For Flood Recovery in Flood-Resilient Cities

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Introduction

From the Central European perspective, inland flooding caused by heavy rainfall represents the most severe natural disaster in terms of property damages (Barredo 2007; EEA 2010). A flood occurrence is always followed by discussions of the extent of public relief provisions, issues of responsibility and liability for damages (particularly public versus private risk-sharing) and innovations of mitigation strategies (see, e.g., Bubeck et al. 2012; Hartmann and Albrecht 2014, among many others). Changes in the responsibility-sharing in flood risk management (FRM) is widely addressed due to changing climate patterns, the continual increase in potential flood damages, etc. (see, e.g., Penning-Rowsell and Priest 2015).

The basic idea of building so-called flood-resilient cities is to enable them to absorb the negative consequences of flooding – both physically and institutionally – in other words, allowing cities to be flooded while sustaining minimal damage (Begum et al. 2007; Petrow et al. 2006). Cities are not meant to be inundated. Making them resilient requires physical adjustments, such as using streets for retention or as discharge flumes, creating evacuation routes, and installing calamity polders or even floating homes (Pierdolla 2008). Institutional adjustments – such as robust and efficient financial recovery and insurance schemes - are also necessary.

However, flood protection of cities as well as post-disaster emergency relief in general is usually considered to be a governmental task (Barraqué 2014). The European Commission established the Solidarity Fund to support affected countries. But how is this recovery money used? How does it prevent flood risks? As damage statistics tell us, fast reconstruction has often not led to more adaptive and resilient cities or areas. Flood victims are often regarded as mere recipients of financial flood recovery schemes, but not as key stakeholders in preventing damage during the next event. In this context, flood recovery schemes and their contribution to flood prevention are not highlighted, but they directly complement the other efforts aimed to prevent flood damage.

Our intention is to change the understanding of financial flood recovery schemes in terms of their solidarity versus efficiency and to prove their risk prevention potential (when properly applied) and to analyze the potential of their application at the municipal/city level. In the paper we also discuss into what extent should be the role of the central government reduced in favour of city representatives, which bear the responsibility for spatial planning, and individuals, who are encouraged to consider self-protection strategies. The deductive argumentation directly refers to the theoretical concept of crowding-out effect that explains how increased central government activity negatively affects the involvement of other actors in a particular sector of an economy.

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