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The influence of climate change on scientific research program of public economics and urban economics**ABSTRACT**

Climate change created the demand for the invention of new auxiliary hypothesis, which induced progressive problem-shift within both in general public economics scientific research programme (PESRP) and urban economics scientific research programme (UESRP). The difference between changes in PESRP and UESRP is because the new auxiliary hypothesis replace some of the old ones in protective belt of UESRP, but do not replace any of the old ones in protective belt of PESRP. I assume that, even before climate change, climate itself fails to be part of the hard core of both PESRP and UESRP. Based on this, I pose two research questions:

Q1: Has climate change, in the case of public economics, only led to the need to articulate completely new auxiliary hypotheses that would protect the hard core of PESRP?

Q2: Has climate change, in the case of urban economics, led to the need to change the hard core of UESRP, because these changes could not be treated as a premise for the formulation of new auxiliary hypotheses that would merely allow for the hard core to be built upon without violating it.

The assessment of the impact of climate change on scientific research programs in public economics and spatial economics will be based on the assumptions of Imre Lakatos's concept of scientific research programs, especially due to the separation of progressive problem-shift from degenerating problem-shift (Lakatos, 1970). First, the definitional attributes of the term "climate change" will be established, allowing us to determine the extent to which it can be treated as an anomaly within the meaning of scientific research program methodology. The next section of the study will address the issue of how long ago climate itself was considered in research programs of public economics and urban economics before the current climate change. This will allow me to determine the extent to which climate issues can be treated as

components of hard core of PESRP and UESRP. This will lay the foundation for examining whether climate change should be viewed as a premise for reconstruction of protective belt, and to what extent taking climate change into account will require more far-reaching consequences, i.e., reconstruction of hard core of the scientific research programs. These issues will be the subject of separate analyses for public economics and urban economics. The paper will therefore deal with the impact of climate change on the condition of public economics and urban economics undoubtedly understood, taking into account the distinction referred to by (Backhouse, 2004), as small-scale research programmes. And I will adopt proposed by (Remenyi, 1979) concept of the study the relations between demi-cores of subdisciplines and the hard core of discipline, where public economics and urban economics could be treated as subdisciplines of economics. I decide to use the methodology of Lakatos' scientific research programs to analyse changes occurring within both public economics and urban economics, taking into account, first of all, the advantages of Lakatos's concept in explaining how the anomaly (or refutation) that is climate change occurs rationalization and recognition by each of economics in question.

Therefore, the considerations undertaken in paper will be contained within the field of arts which can be demarcated, following (Hands, 1992), as "Lakatos and economics", and placed in that piece of it which is principally historical, and attempting to interpret an episode in the history of economic thought along Lakatosian lines. The subfields are public economics and spatial economics, and the episode is climate change invasion of the protective belt of two subfields of economics, public economics and spatial economics.

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