

On the construction of organised crime index with the use of stochastic dominance efficiency methodology

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Abstract

There is an extensive literature examining the effect of organised crime on socio-economic and political factors. However, since there is no consensus on which variables should be considered part of the organised crime index and how important they are in its construction, the definition and use of organised crime differ among this stream of literature. The aim of this paper is to construct an organised crime index and to do this, we first conduct a systematic literature on how organised crime is measured by the previous literature and we identify the set of variables used to construct it. Secondly, we find that existing literature place equal importance to different concepts of organised crime as this literature used either sum or weighted average of set of variables that are linked with organised crime. In this paper instead, we use stochastic dominance efficiency methodology to combine set of indicators that leads to worst-case scenario of organised crime index for 103 Italian provinces. The findings of this paper suggests that inclusion of some variables in the construction of organised crime index, which are used by some set of literature, only contributes partially to the so-called measured organised crime. We find that the extortion, criminal association, kidnapping and arson type of criminal activities are more present across Italian provinces and over-time requiring more of a nation-wide policy to eradicate such crimes to reduce organized crime's effect on socioeconomic factors. Our findings also suggest that mafia type of crimes, track robberies, bomb/incendiary attacks are not contributing to the worst-case scenario and are observed in only few provinces and time periods suggesting that province-specific policy actions are needed to fight against such criminal activity.

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