

# Incentives to contribute to public issues: is money a must when looking at long-lasting cooperation?

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## Abstract

*“Between a monetary sanction and a voluntary participation to some repair work with employees, I preferred this last solution because I learnt a lot from a technical and social point of view whereas with the monetary punishment, I would have started again to steal and degrade those free access bicycles” (a young offender at radio France Inter, 2/ 25/ 2015)*

This paper looks at the permanence effect of incentives by comparing non-monetary (NMI) and monetary incentives (MI) to contribute in public-good game experiments. Permanence effect or long-lasting cooperation is a real issue in public-good games as it raises the question of behaviors after the removal of incentives. Practical applications like payments for ecosystem services tend to illustrate the lack of permanence at the end of the agreements: even after a long-period contract, permanence is not, or rarely, observed and sometimes agents can implement some management practices that appear to be worse for environment (Sattler et al, 2013; Engel et al, 2008; Nsoh and Reid, 2013...). These bad results have been observed as well in experiments: after the removal of incentives, team performance is worse than before incentives for different reasons like the loss of intrinsic motivations (Falk and Kosfeld, 2006). Motivations to compare permanence effects of MI and NMI are mainly based on empirical observations showing effects of crowding out voluntary cooperation when using MI (e.g. blood donation). Moreover MI are difficult to quantify and often insufficient (i.e. not covering all the agent's real costs), they can create some perverse effects (a positive contribution and a negative externality in another area), they are temporary (in a defined period) and finally they can be costly. Experiments looking at permanence effect seem to be very recent and only based on MI: strong incentives in the first rounds do not ensure long-lasting cooperation as in the following rounds (Bruttel & Friehe, 2014). However no studies tried to compare the incentives, either monetary or non-monetary, in terms of permanence effect. In a public good experiment, we compare treatments in which monetary and non-monetary incentives are available. After a fixed number of periods, these incentives are removed and we compare the long-lasting effect on contributions to the public good.