

Non-technical summary:

The objective of this paper is to analyse a situation in which individuals have different opportunities to commit a fraud, where we model these opportunities in terms of costs incurred to defraud. Our view is that there may exist different technologies to commit a given fraud, involving different costs. In a context in which individuals incur different monetary fixed costs, we analyse the problem of setting the optimal audit policy for an anti-fraud authority in order to see how the probability of audit should differ across types. To make this issue relevant, we consider the case of costly audits and assume that the enforcement agency is endowed with limited resources.

We first analyse the case where the enforcement agency observes the agents' types and show that she should usually set different probabilities of audit for agents with different opportunities to cheat. If the budget of the enforcement agency is too small, it would be too costly (or even impossible) to deter agents with lower opportunities to cheat, and the agency sets equal probabilities, thereby allocating to each group a share of the budget equal to its relative size. However, as the budget increases, it becomes optimal to first ensure that agents with lower opportunities are deterred from cheating. This is because individuals who have to incur higher costs for cheating are more easily deterred from committing a fraud and hence auditing is more effective for this group of cheaters. If the budget is not large enough such a policy implies that those individuals with greater opportunities to commit a fraud face a lower probability of being detected.

We then consider the case where the enforcement agency does not observe if an agent has a high or low opportunity to commit a fraud, but knows whether the agent belongs to a more or less risky group. Although the enforcement agency cannot distinguish whether individuals have to incur a cost for cheating, the audit rule is very similar to the case where there is perfect information about the agents' type. If the budget is too small it would be too costly to set different probabilities of audit for the two groups. When the budget increases, the criterion is still to tackle first the individuals with lower opportunities to evade.

We generalise our results and conclude that when there are different technologies to commit a given fraud, implying different costs and therefore different opportunities to engage in illegal behaviour, the audit strategy should take this into account. When the budget of the enforcement agency is limited, the enforcement agency should first tackle individuals who are more easily deterred from cheating, i.e. those incurring higher costs to defraud, or using a more complicated technology.