



Assessing the efficiency of priorities for traffic law enforcement in Norway

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ABSTRACT

This paper assesses the efficiency of priorities for traffic law enforcement in Norway. Priorities are regarded as efficient if: (1) enforcement ensures a sufficient level of deterrence to keep down the rate of violations; (2) selection of target violations for enforcement is based on the risk attributable to them; and (3) an optimal level of enforcement is selected, i.e. the marginal benefits of enforcement in terms of preventing accidents equal the marginal costs of enforcement. The efficiency of current traffic law enforcement in Norway is assessed in terms of these criteria. It is found that the risk of apprehension varies considerably between different traffic violations. These variations do not reflect the risk attributable to the violations, i.e. it is not the case that the risk of apprehension is higher for violations that make a large contribution to fatalities and injuries than for violations that make a smaller contribution. In principle, shifting priorities so as to increase the risk of apprehension for some violations and reduce it for other violations could make police enforcement slightly more efficient. The main finding, however, is that the current level of enforcement is too low. Cost-benefit analyses show that substantially increasing the amount of police enforcement is cost-effective.

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1. Introduction

Violations of road traffic law are a major road safety problem in all highly motorised countries. Considering the fact that many traffic violations are widespread, there is reason to ask whether current traffic law enforcement is ineffective or insufficient to deter violations. Is enforcement targeted at offences that only make minor contributions to traffic fatalities or injuries, while the enforcement of violations making major contributions to traffic fatalities and injuries is neglected? Is the total amount of enforcement insufficient to deter violations? This paper explores these issues. The following main questions are discussed:

1. Is the current level of enforcement and risk of apprehension for traffic violations sufficient to keep the rate of violations low?
2. Does the risk of apprehension vary in proportion to the contribution various violations make to fatalities and injuries, i.e. is there a higher risk of apprehension for violations making a large

contribution to traffic injury than for violations making a small contribution to traffic injury?

3. Is it cost-effective to increase the level of enforcement or is the current level close to optimal?

The discussion is based on a study of traffic law enforcement in Norway (Elvik, 2010a). The study surveyed the incidence of traffic law violations, the current level of enforcement and risk of apprehension, and driver perceptions of the risk of apprehension. The contribution of various violations to traffic injury was also estimated.

2. Deterrence of traffic law violations in Norway

The true rate of violations is unknown for most traffic law violations. In Norway, estimates of the rate of violations at more than one point in time exist only for speeding, drinking and driving and not wearing seat belts (Sakshaug, 1986; Elvik and Christensen, 2004, 2007; Muskaug, 1985, 2008; Glad, 1985; Glad and Vaas, 1994; Gjerdet et al., 2008). The rates of speeding, drinking and driving and not wearing seat belts in the three periods 1980–1984, 1993–1999 and 2004–2006 are shown in Table 1. These were the periods for which data were available.

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