

IMPACT STUDY OF TELEMATICS AUTO INSURANCE

Cornel Coca Constantinescu¹, Ion Stancu^{2*} and Iulian Panait³

¹⁾ *Financial Supervisory Authority, Bucharest, Romania*

²⁾ *Academy of Economic Studies and Institute of Financial Studies, Bucharest, Romania*

³⁾ *Financial Supervisory Authority and Institute for Financial Studies, Bucharest, Romania*

Abstract

The development of telematic systems, as well as the need to differentiate the motor insurance market, led to the emergence of new clauses in motor insurance contracts. Thus, vehicle insurance contracts with self-check (and telematic) insurance policies are in the recent focus of insurance companies for motor insurance. With the help of a telematics device installed on the vehicle and a mobile application the driving mode of the driver is permanently assessed; the rating is calculated according and the discount for the insurance price is set accordingly. These types of auto insurance contract terms can provide, on average, 25% savings for carefully drivers.

Our paper presents, the recent developments in telematics insurance in Europe and around the world and the Romanian drivers propension to accept the monitoring of their driving behavior. We then present the economic, financial and socio-ecological advantages versus disadvantages revealed by specialized literature for both policyholders and insurers. In this context, we will prefigure the future of telematics insurance in Europe.

In our empirical study we estimate the financial impact of telematics insurance in Romania on gross written prices and gross paid indemnities. Finally, we estimate the socio-economic impact of these telematics insurance on the decrease in the number of kilometers, fuel consumption, number of accidents and casualties, and implicitly, on the reduction of the cost of the compensation. For this impact study we used the scenario technique (pessimistic, moderate and optimistic) in relation to the baseline scenario, respectively, the estimate of the natural evolution of the insurance market in the absence of telematics.

Keywords: auto telematics insurance, driving behavior rating, financial impact of telematics insurance, socio-economic impact of telematics insurance, scenario technique.

JEL classification: C53; D03; D53; G22

* Contact author, **Ion Stancu** – ion.stancu@isfin.ro