

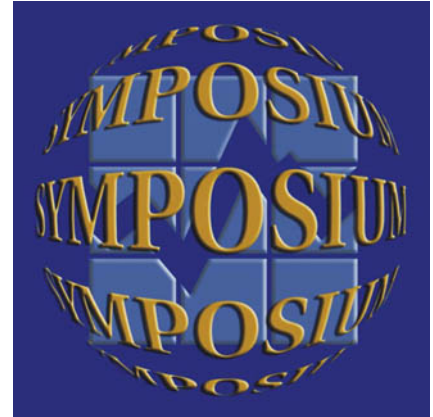


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TO TURN OVER OR NOT TO TURN OVER? COMBINING REGISTRATIONS AND PROBABILITY MODELS ON SURVEYS TO ESTIMATE THE ACTIVITY STATUS OF ENTERPRISES

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ABSTRACT

To determine the number of companies information is needed from administrative databases. A number of problems arise when administrative registrations are to be translated for statistical purposes. Firstly, legal units are translated into business units. Next, the question is whether the units in the statistical database are really existing business units? Other registrations such as VAT registrations, income or company tax registrations may help out in identifying the existence of the enterprise. However, due to incomplete sources and late availability, it is not possible to get a complete image for all registered companies as to whether they are economically active or not. If an enterprise is missing in a registration file, we do not know whether it is so because it is inactive or because of late report, errors in registration, or otherwise.

This paper presents a probabilistic model in which the number of enterprises in different strata is estimated. Logistic regression is applied for estimating the probability of companies' activity statuses based on a survey on existence. The predictive model is combined with all available registration information to obtain a picture as complete and accurate as possible. The implications, stability and robustness of this model are discussed and illustrated. The method proves to be very stable and robust.

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