Contents lists available at ScienceDirect

European Journal of Political Economy

Measuring political information rents: Evidence from the European agricultural reform ☆

Hans Peter Grüner[a], Daniel Muller[b],*

[a]University of Mannheim and CEPR, London, United Kingdom
[b]University of Mannheim, Germany

ARTICLE INFO

ABSTRACT

This paper develops a method to estimate information rents – the difference between the actual compensation and the true willingness to accept – of losers of a reform who receive a monetary compensation. Our method explicitly accounts for survey respondents' reluctance to reveal a willingness to accept which is smaller than the actual compensation. We apply our approach to the case of the 2005 European agricultural reform using uniquely gathered survey data from farmers in Lower Saxony, Germany. We find empirical indications for strategic misreporting. Correcting for these effects with a structural model, we find that information rents are in the order of up to 14% of total compensation paid. Moreover, we show that the reform could not have been implemented distinctly cheaper by conditioning compensation schemes on observable factors.

© 2016 Elsevier B.V. All rights reserved.

1. Introduction

Reforms creating huge welfare gains may fail when they face substantial opposition of special interest groups (see for example Boeri et al. (2002), Drazen (1996), Saint-Paul (2000), Rodrik (1996) and Rodrik (1993)). In principle, it should be possible to compensate losers of such reforms if the gains of the winners are large enough. However, losses are often distributed unevenly and they may also be private information. In this case, information rents – the difference between the actual compensation and

the true willingness to accept (WTA) – of reform-losers are an obstacle to any compensation. If the information rents are large enough, compensating enough reform losers may turn out to be too costly and hence even welfare enhancing reforms may fail.[1]

In this paper we estimate information rents that arise when policy makers are not informed about how individuals expect to be affected by a reform. For this purpose, we develop a method to estimate political information rents of losers of a reform, which explicitly accounts for the reluctance of reform winners to reveal their willingness to accept.

The contribution of this paper is twofold. Firstly, we derive a method to estimate the distribution of political information rents based on survey data related to the 2005 European agricultural reform. During this reform the European agricultural subsidies were shifted away from payments bound to quantities produced to flat payments. According to standard economic reasoning, such a reform should be efficiency enhancing because prices for agricultural products are brought closer to their distortion–free market value. In order to estimate the aggregate size of information rents we collected unique survey data from more than 300 farmers in Lower-Saxony, Germany. The main problem that one is facing in this context is that winners' and losers' response rates may differ in the sense that reform profiteers are more reluctant to reveal their willingness to accept than losers. In fact the survey data we collected exhibits exactly this characteristic.

The data we collected permits to tackle this problem: We asked farmers about their willingness to accept in a two step procedure. First, we asked a yes–no question about whether the respondent belongs to the group of reform losers or winners – where non-responses do not seem to be a matter of concern – and, in a second question, we asked for the exact amount in monetary units. Based on this information, we develop a maximum likelihood procedure to estimate the distribution of the willingness to accept that explicitly takes different response rates and incentives to misreport into account. This estimator is derived from a utility function which assumes that people dislike both, lying and harming their fellow farmers by stating a low WTA. Then, we structurally estimate this model and make inference about the empirical distribution of losses and gains. Applying this method to our survey data, we find that substantial information rents of around 14% of total compensation have been paid to European farmers during the 2005 agricultural reform. We also find empirical support for strategic misreporting, which we account for in our estimations.

Second, we study whether it would have been theoretically possible to implement the reform in a less expensive way by conditioning compensation packages on characteristics of farmers and their farms. To be more precise, we tried to empirically predict the WTA using variables gathered in the survey. If a variable would turn out to be a robust predictor of the WTA (for example farm size), it could then in turn be used to condition compensations for farmers. Nevertheless, we do not find such a variable. Hence, it seems unlikely that public expenses could have been reduced substantially by conditioning compensation packages on observable characteristics ex-ante. We find that the farm size is empirically uncorrelated with the WTA.

About 50% of the farmers surveyed find the compensation payment that they receive large enough. This indicates that the European Union has chosen a compensation that substantially reduced the resistance to the 2005 agricultural reform. Although the estimated share of the information rent is substantial, we believe that this reform may serve as a blueprint for efficiency enhancing reforms in other sectors.

From a methodological point of view our study is related to a large literature that deals with the valuation of non-market goods, for example environmental protection and public goods. These studies draw on the contingent valuation method (CVM), which goes back to Ciriacy-Wantrup (1947). The CVM was first empirically implemented by Davis (1963). It generally comes in four different styles: the bidding game, the payment card, the open-ended approach (the one that we follow in this paper) and the dichotomous choice approach (single- vs double-bounded).[2] While all approaches have advantages and disadvantages, the latter approach seems to be slightly preferred by most researchers (but is clearly not free of problems, see Cummings et al. (1995)). It consists of confronting individuals with the binary question whether they would be willing to pay a certain fixed amount for a public good (Mitchell and Carson, 1989). Individuals then only have the choice to answer 'yes' or 'no'. Nevertheless, in our setting such an approach has two major disadvantages which is the reason why we employ a different elicitation technique. First, it is not possible to get any good a priori information on what a reasonable interval from which to draw the bids would constitute. It is also known that the choice of the interval from which to draw bids is not innocent with respect to the elicited answers. Second, and even more importantly, such a binary approach does not deliver enough statistical information to allow us to estimate the whole distribution of valuations given our sample size. That is why we choose the open-ended approach combined with an upfront yes-no question.

The paper proceeds as follows. Section 2 provides some theoretical background, Section 3 describes the agricultural reform of 2005 in more detail, depicts how the survey was practically implemented and presents the data we collected in more detail. Section 4 presents a first nonparametric approach to the data. In Section 5 political information rents are structurally estimated using a simple survey response model. Section 6 demonstrates to what extent verifiable information could have been used to reduce farmer's information rents. Section 7 concludes.

---

[1] There is a vast literature that deals with reasons for the success or failure of reforms (see e.g. Agnello et al. (2015) and the references therein). The role of information rents in labor market reforms has been theoretically studied by Grüner (2002). A different reason for the failure of reforms has been studied by Fernandez and Rodrik (1991). In their paper individual uncertainty about reform outcomes potentially constitutes an obstacle to successful reform implementation.

[2] See Hanemann (1994), Portney (1994) and Venkatachalam (2004) for reviews of the CVM and Diamond and Hausman (1994) for a critique.