

Poverty and Inequality Mapping in Tuscany

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1. Introduction

The need for having reliable statistical information at one's fingertips on topics such as individual and family living conditions from a very elementary and detailed geographical point of view calls, at least in its present state, for an enormous amount of statistical and socio-economic research. The reasons for this are mainly due to the new and growing authority that the local territorial bodies tend to be taking on in connection with administrative and institutional decentralization. Even if it is well organized it is difficult to satisfy such a need directly and in isolation within a statistical system which uses data resulting from census and/or sample surveys or from administrative archives. As it stands, a possible solution to this problem may be looked for in methods which make use of auxiliary information¹ or in processes which integrate the various sources of statistical data available.

Other cognitive processes such as ad hoc surveys on samples which are sufficiently widespread to guarantee statistical significance in micro-zone realities (together with sample designs capable of picking up on the complexity of a very varied territorial reality) often come up against costs which are difficult to justify as well as to sustain within the budgets of bodies or institutions which are geographically quite small.

The present contribution, beginning with analytical experiences referring to non-Italian territorial contexts and using research input derived mainly from international cooperation bodies, aims at experimenting poverty mapping in diversified Italian territorial areas which at the same time are quite homogeneous as far as socio-economic conditions are concerned. (Areas, that is with a relatively high individual and family standard of living). Poverty mapping is a method of aggregation between alternative data sources. It is based on the existence of a census source and an ad hoc sample survey of the living conditions of families which uses adapted and efficient statistical techniques to "spread" the basic information of the sample survey on the most varied territorial reality of the census source, thereby exploiting a limited set of information which is common to the two different sources.

As already mentioned above, the study of individual and family living conditions through poverty mapping has, up until now, been applied in countries where economic development is very different from the Italian one. It has mainly been applied to developing realities characterized by a much less complex economic structure than the one considered in the present paper. The aim of this work was to simulate consumption expenditure and not income. Therefore this work should be interpreted as experimenting

¹Among the methods of statistical analysis relating to the estimation for the small areas which use auxiliary information, there are model based methods for which the most important aspect lies in the fact that the parameter being studied is not considered as a constant but as a random variable. By using models of the type Area Level Random Effects Model (Fay and Harriot, 1979) a first estimation of a set of poverty indicators for small areas in Tuscany was carried out (Betti *et al.*, 2005).

Poverty and Inequality Mapping in Albania. Project financed by the World Bank, 2002; Poverty and Inequality Mapping in the Commonwealth of Dominica, project financed by the Caribbean Development Bank, 2005.

a method to see whether poverty mapping may be applied in developed economic contexts in which the distribution structure regarding income and consumption is very complex. For simulating consumption expenditure, resorting to the family as unit of reference is justified as the level of consumption largely depends on the size and type of household. As far as the simulation of income distribution is concerned, initially, it appears possible to use the individual as the unit of analysis and simulate the distribution of individual incomes for all the individuals in the population census residing in the three areas of reference. The overall informative picture was to be greatly extended with the obvious parallel methodological complications and increase of computation times, and it would undoubtedly have been worth it. However it was impossible to do this because from the census questionnaire we are not able to know if an individual receives an income or not and therefore in the data simulation stage we would not have known which census unit to involve.

This paper innovates for a series of reasons; (i) first of all it consists of the first poverty mapping exercise based on income and not on consumption expenditure; up until now, poverty mappings have always been based on total household consumption expenditure; (ii) the procedure adopted here is based on a relative concept of poverty, which is more appropriate for developed countries. Traditionally poverty lines adopted for poverty mapping in general, and by the World Bank in particular, are based on a so-called basic needs approach, i.e. on an absolute or quasi-absolute approach on poverty measurement; (iii) the poverty line is not considered an exogenous (or fixed) parameter, but it is recalculated at each simulation of the income distribution in the population, so as to take into account this additional source of variation; (iv) the results of the present analysis can have a high impact on policy makers; (v) finally the paper faces some peculiarities of the entire poverty mapping process, which are not common in literature: as we will see in Section 4, a special treatment for the simulation of residuals in the so-called stage two was needed.

The poverty mapping has been conducted on a Region of about 3.5 million inhabitants, which accounts for about 6% of the entire Italian population. For this reason this exercise can be considered as an experiment for extending the analysis to other Regions in Italy and the European Union. From this point of view, the data from the survey EU-SILC (European Union - Statistics on Income and Living Conditions) could be considered a useful and harmonised source within with the national Censuses.

The paper is composed of six Sections; after the present introduction, Section 2 briefly describes the theoretical framework of the poverty mapping exercise. In Section 3 the data sources are described: they consist of the XIV Population and Housing Census conducted in 2001 and the Survey on Living Conditions of Families in Tuscany (ICVFT, year 2002). Section 4 describes the estimation process and the simulation of income distributions for each household in the Census. Section 5 reports the poverty and inequality indices calculated at Region, Province, Local Economic Systems and Municipality levels, within with their corresponding standard errors.

2. Poverty mapping

The Poverty Mapping is based on a simple idea that can be explained as follows: having data from a smaller and a richer data-sample, such as a sample survey and a census, a regression model of the target household-level variable, given a set of covariates based on the smaller sample, can be estimated. The set of covariates have to be restricted to those collected also in the larger sample, in this way, the estimated

distribution can be used to generate the distribution of the target household-level variable y_h for the population or sub-population in the larger sample given the observed characteristics. Therefore, the conditional distribution of a set of welfare measures can now be generated and the relative point estimates and standard errors can be calculated.

Practically the methodology follows two steps:

- a) the survey data are used to estimate a prediction model for the target variable (stage one);
- b) simulation of the target variable for each household of the census and poverty/inequality measures are derived with their relative prediction error (stage two).

The key assumption is that the model estimated from the survey data applies to census observation; of course the assumption is most reasonable if the survey and census year is the same, unfortunately it is not our case, so when interpreting results we need to consider that the poverty estimates obtained refer to the census year.

2.1. Poverty Mapping Stage 1: a prevision model for income

This step (Stage one) consists in developing an accurate empirical model of a logarithmic transformation of the household per-capita total consumption expenditure or household income.

As already mentioned, until now, applications of the Poverty Mapping methodology (Elbers *et al.*, 2003) have been conducted considering, as target variable, the logarithmic transformation of the household per-capita total consumption expenditure, so our application is the first one based on the household income variable.

In developing this new Poverty Mapping exercise many different specifications for the model based on survey data have been experimented considering either a logarithmic transformation of the household income or of the equivalent household income. According to the explicative capacity of the experimented models, the authors have chosen as dependent variable of the model the logarithmic transformation of the available household income.

Denoting by $\ln y_{ch}$ the logarithm income collected for the household h in cluster c , a linear approximation to the conditional distribution of $\ln y_{ch}$ is considered:

$$\ln y_{ch} = E[\ln y_{ch} | x_{ch}^T] + u_{ch} = x_{ch}^T \beta + u_{ch} \quad (1)$$

being x_{ch} the vector of covariates for the household h in a cluster c . Previous experience with survey analysis suggests that the proper model to be specified has a complex error structure, in order to allow for a within-cluster correlation in the disturbances as well as heteroschedasticity. To allow for a within cluster correlation in disturbances, the error component is specified as follows:

$$u_{ch} = \eta_c + \varepsilon_{ch} \quad (2)$$

where η and ε , represent, respectively, the cluster component error and the household component error. Moreover, the error components are supposed to be independent of each other and not correlated to the matrix of explanatory variables. Since residual location effects can highly reduce the precision of welfare measure estimates, it is important to introduce some explanatory variables in the set of covariates which explain the variation in income due to location. For this reason introducing the location means of each covariate into the model covariates may be a good proposal.

If the hypothesis of homoscedasticity is not accepted the estimation of the model parameters could be carried out using the Generalized Least Square Estimator (GLS). In order to apply the GLS method the variance covariance matrix of the error term u_{ch} have to be estimated by a proper econometric procedure (Greene, 2000).

The final results of Stage 1 consist of a vector of estimated parameters and their variance covariance matrix; this set of estimates provides the input for Stage 2.

In order to reach the final results of Stage 1, some phases have to be overcome. These intermediate phases are summarized here quite briefly.

The initial step of Stage One aims at verifying whether or not weighting helps in the prediction model. The Hausman test implemented here (Deaton, 1997) considers, as null hypothesis, the fact that the regressions are homogenous across strata, so that the estimator obtained by a weighted procedure and the one obtained by an unweighted procedure are both unbiased (the difference between them has zero expected value); by contrast when heterogeneity and design effect are important the two expectations will differ. In practice, in order to implement the test an auxiliary regression model is estimated which has all the usual regressors as well as all regressors interacted with household weights as regressors; then we test whether the estimated parameters on these interacted regressors are jointly zero, using a standard F-test. If the test fails to reject the null hypothesis, then it is necessary to use household weights in the analysis.

The initial estimate of β in equation (1) is obtained by using OLS; with consistent estimate of β , the residuals from the regression are used as estimates of the overall disturbances $\hat{u}_{c,h}$. The residual is decomposed into uncorrelated household and location components as follows: $\hat{u}_{c,h} = \hat{\eta}_c + e_{c,h}$

The estimated location components ($\hat{\eta}_c$) are the within-cluster means of the overall residual. The household component estimates ($e_{c,h}$) are the overall residual net of location components; these values are used to estimate the variance of $\varepsilon_{c,h}$.

The significance of the cluster effect have to be tested by the Lagrange multiplier test for random effects (Breusch and Pagan, 1980).

2.2. Poverty Mapping Stage2: income distribution simulation

The parameter estimates obtained from the previous step are applied to the census data so as to simulate the available income for each household in the census.

The fully specified simulation model is defined as follows:

$$\hat{y}_{c,h} = \exp\left(x_{c,h}^T \tilde{\beta} + \tilde{\eta}_c + \tilde{\varepsilon}_{c,h}\right) \quad (3)$$

A set of simulations is conducted: the beta coefficients, $\tilde{\beta}$, are drawn from a multivariate normal distribution with mean $\hat{\beta}$ (the coefficients of the OLS estimation) and variance covariance matrix equal to the one associated with $\hat{\beta}$; relating to the simulation of the residual terms, $\tilde{\eta}_c$ is a random variable as well as $\tilde{\varepsilon}_{c,h}$, for both it is necessary to investigate on the distribution.

The full set of simulated $\hat{y}_{c,h}$ (see equation 3) is used to calculate the expected value of each of the poverty measures considered.

For each of the simulated consumption expenditure distributions a set of poverty

and inequality measures is calculated, as is their mean and standard deviation over all the 100 simulations.

3. Data source and level of disaggregation of surveys

When performing a poverty mapping exercise, it is very important to identify the correct size and type of the territorial disaggregation, for which the regression model of stage one should be estimated.

In fact, if the size of the territorial unit is too large, the relationship in the model (1) may vary among different socio-economic sub-divisions of the area; therefore the estimation of the unique model can lead to misleading results. On the other hand, when too small a territorial unit is taken into consideration, the size of the corresponding sub-sample in the survey may be too small to obtain efficient estimates of the parameters of the model (1). In general it is difficult to assess the right size; bearing in mind that this exercise could be seen as an experiment for extending to Italy and to the European Union, we can think of considering the European NUTS classification². When possible, i.e. when the sample size of the survey is of sufficient size, choosing a territorial disaggregation similar to NUTS2 or even finer is suggested.

In the present work we use an *ad hoc* survey conducted on a NUTS2 Region in Italy, Tuscany; the sample size is adequate for estimating more than one model (1): see Section 4 for further details.

The idea of launching a survey on living conditions in Tuscany (ICVFT) was planned in the year 2001³. At that time, there was a lack of information on income distribution, living conditions and welfare at Regional level, essential for proposing adequate fiscal and social policies, as well as in the areas of housing and education systems.

The field work was conducted during spring 2002 by means of a face-to-face questionnaire interview (PAPI). Personal and household components of income have been collected from all the adults in the household, as well as a series of non-monetary indicators necessary for performing a modern multi-dimensional analysis of poverty and social exclusion (Lemmi and Betti, 2006).

The sampling scheme adopted for the survey, in line with other national surveys conducted by ISTAT and the Bank of Italy, consists of a two-stage sampling with stratification of the Primary Selection Units (Ghellini and Neri, 2005).

The number of completed household questionnaires (sample size) was 2,625; those households contain 6,867 individuals, 4,703 of which are recipient of some source of income. They have been interviewed so as to obtain information on working conditions and on incomes received.

4. Results of Stage One and Two

In order to specify and estimate a prevision model for income in Tuscany, many trials have been conducted. First of all only one model was estimated for the whole

² Nomenclature of Territorial Units for Statistics.

³ ICVFT (original name Indagine sulle Condizioni di Vita delle Famiglie Toscane) survey is the base of a series of research on income distribution, living conditions, evaluation of fiscal policies, poverty and social exclusion, conducted jointly by the C.R.I.DI.RE. “C. Dagum” research centre of the University of Siena, the Regional Institute for Economic Planning of Tuscany (IRPET) and the Statistical Office of the Tuscany Region.

region, then three different models for three different areas of the region (area of Firenze, Prato, Pistoia; area of Pisa, Lucca, Livorno, Massa; area of Grosseto, Siena, Arezzo) and finally two models for two macro areas of the region (inner area, made up of Firenze, Prato, Pistoia, Siena, Arezzo e coast area, made up of Pisa, Lucca, Livorno, Massa, Grosseto). This last specification has been chosen in order to take into account the area differences, keeping the sample size of each area sufficiently large to estimate the models.

The Hausman test to decide if sample weights have to be used has been applied to each area model: failing to reject the null hypothesis for all the areas, weights are used in the analysis. The initial estimate of β in equation (1) is obtained from OLS (weighted with survey sampling weight). On the residual estimated, the homoschedasticity hypothesis has been tested (White, 1980), and for both the area models the hypothesis is accepted⁴. For each area model the significance of the cluster effect has been tested by the Lagrange Multiplier test for random effects (Breusch and Pagan, 1980). Testing $\text{Var}(\eta_c) = 0$, we fail to reject such a hypothesis at 5% level. The result of the test seems to be reasonable, given that the estimated share of the location component with respect to the total residual variance, represented by $\rho = \sigma_\eta^2 / \sigma_u^2$, for all the models, is lower than 0.05.

According to the analysis conducted, the final results of Stage 1 consist of the vector of the estimated parameters (OLS estimator) of the model, presenting the logarithm of the available household income as dependent variable, and the variance covariance matrix of the OLS estimator.

The independent variables for both the models are household covariates, head of household and partner (if present) as well as some housing information.

The explicative power of both the models is satisfactory, in fact the determination coefficient are 0.56 and 0.54, respectively for the inner and the coast area of the region.

Observing figures in Table 1, and particularly the sign of each estimated coefficient it is evident that they have a reasonable economic meaning. Before explaining in detail that meaning, let us specify the reference (base) unit of the models.

For the inner area model, the base household is composed of one person who is less than 65 years old, or of the head of household plus other persons (partner and children – less than 18 years - are excluded). In the household there is only one income recipient; they live in the province of Prato or Arezzo or Pistoia; the head of household has a

⁴ If we fail to accept the homoschedasticity hypothesis, to allow for heteroschedasticity in the household component, a model is chosen which best explains its variation. The covariates of this model can be the usual regressors as well as their squares or interactions between variables. A logistic model of the variance $\mathcal{E}_{c,h}$ conditional on the chosen set of regressors, z is estimated (bounding the prediction between

zero and a maximum $A = (1.05) \cdot \max(e_{c,h})$) $\ln \left[\frac{e_{c,h}^2}{A - e_{c,h}^2} \right] = z'_{c,h} \alpha + r_{c,h}$. Let $\exp(z'_{c,h} \alpha) = B$, using the delta method the household specific variance is estimated as:

$$\hat{\sigma}_{c,h}^2 = \left[\frac{AB}{1+B} \right] + \frac{1}{2} \text{var}(r) \left[\frac{AB(1-B)}{(1+B)^3} \right].$$

The variance of σ_η^2 is estimated non-parametrically,

allowing for heteroschedasticity in $\mathcal{E}_{c,h}$ (see Appendix 2 of Elbers, Lanjouw and Lanjouw, 2002). The two variance components are combined in order to calculate the estimated variance covariance matrix ($\hat{\Sigma}$) of the overall residual of the original model. Once $\hat{\Sigma}$ is calculated the original model can be estimated by GLS.

low/medium education, lower than diploma level; he/she is retired or inactive, otherwise, if employed he/she is a blue collar worker.

The reference variables for the coast area model are quite similar to the inner model. The base household is composed of more than one component (partner excluded, as well as children, if present and are older than 18). In the household there is only one income recipient; the house size is small-medium (less than 50 square meters per capita). The head of household have a low/medium education level lower than diploma; he/she is retired or inactive, otherwise, if employed he/she works in the agricultural sector.

In order to understand the meaning of the variables presented in Table 1 better, we must remember that the dummy variables are equal to one if the households/individuals are in the condition labelled by the variable name.

Let us analyse the meaning of the significant variables. The household size has a significant quadratic effect: as expected the household income has a parabolic shape, the maximum of the parabola is for 5/6 components. Considering the household type – *ceteris paribus* - to be single, older than 65 years or with under age children, leads to a decrease in the available income. The presence of more than one income recipient leads of course to an economic advantage.

Reasonably, owning the house where one lives is an advantage as well as living in a large house (50 square meters per capita). Moreover, for the inner area model the coefficients of the variables indicator of a household living in Siena or Florence provinces are significant and positive; in fact, here the standard of living is quite high.

For both the specified models, we can observe the same effect for the age variable: the household income has a parabolic shape, with respect to the age of the head of household, with a maximum at about 60 years old (60 for households living in the inner area and 57 for the coast area). Another important variable in explaining household income is the level of education of the head of household: having a degree or a high school diploma makes the income increase.

Variables quoted previously are easier to explain, however we have some interaction effect in the models that are worth considering.

In the inner area model, the SPOUSE variable has a negative coefficient; the result should appear quite strange, however it becomes reasonable considering the interaction effects also (SP_DEGREE, SP_EMPLOYED, SP_RETIREDD). In fact when SPOUSE is equal to zero, all the variables connected with it in the interactions have no effect; when the partner is a member of the household (SPOUSE=1) and all the variables of the interaction terms are equal to zero, it means that the partner has an education lower than degree level and is unemployed or retired, so a negative effect is reasonable.

On the contrary, if for example SPOUSE=1 and SP_EMPLOYED=1, means that the head of household has a partner and the partner has an education lower than degree level and is employed, a positive incidence of the variables regarding the partner (the effect is equal to $(-0.19+0.23=0.04)$ is reasonable.

Similar is the explanation of the interaction between HH_AGE and HH_ENTREPRENEUR (labelled as HH_AGE*ENTREPRENEUR). For the reference household, the head of household, if employed is a blue collar worker; if HH_ENTREPRENEUR =1 the head of household is an entrepreneur. The negative coefficient of the variable HH_ENTREPRENEUR could seem unreasonable, but being the variable part of an interaction effect with the head of household age variable, it follows that the negative effect regards only entrepreneurs less than thirty years old,

after the interaction effect becomes positive. For example if the head of household is forty, being an entrepreneur instead of a blue collar worker has a multiplicative impact on he household income equal to 0.14 ($-0.46+0.05*40=0.14$).

A similar argument could hold true for the model specified for the Costal Area regarding the variable SPOUSE.

Table 1. Regression results: OLS coefficient and standard error (in parenthesis)

	Central	Coastal
Intercept	1.8156***(0.1742)	0.9301***(0.2118)
Size	0.4492***(0.0617)	0.4991***(0.0646)
Size ²	-0.0393***(0.0086)	-0.0433***(0.0089)
HH_age	0.0172***(0.0061)	0.0428***(0.0076)
HH_age ²	-0.00014***(0.00006)	-0.0004***(0.00007)
HH_diploma	0.1902***(0.0294)	0.2411***(0.0340)
HH_degree	0.3354***(0.0434)	0.3670***(0.0570)
HH_agric		-0.2580**(0.1066)
HH_manager	0.1955***(0.0537)	
HH_employee	0.0729*(0.0401)	
HH_entrepreneur	-0.4673***(0.1597)	0.2191***(0.0547)
HH_self	0.0926**(0.0450)	0.2041***(0.0561)
Spouse	-0.1925***(0.0451)	-0.0911**(0.0417)
SP_degree	0.1477***(0.0468)	0.2003***(0.0651)
SP_employed	0.2288***(0.0449)	0.1009**(0.0435)
SP_retired	0.0979**(0.0489)	
F_single_over65	-0.2338***(0.0550)	
F_parent_children	-0.5709***(0.1153)	-0.5137***(0.1396)
F_couple_child	-0.1375***(0.0412)	-0.1715***(0.0504)
F_couple_2Children	-0.3286***(0.0522)	-0.2758***(0.0624)
Two_income_recipients	0.1606***(0.0443)	0.3383***(0.0391)
Mq_pc_over50	0.1436***(0.0304)	0.2050***(0.0394)
H_rent_	-0.5117***(0.0314)	-0.4109***(0.0385)
H_other	-0.0923*(0.0364)	0.0872***(0.0459)
RESID_FI	0.1274***(0.0241)	
RESID_SI	0.06415*(0.0354)	
HH_age*entepreneur	0.01508***(0.0032)	
N	1446	1083
R ² adj	0.5636	0.5364

Significance levels: * 10%, ** 5%, *** 1%.

Stage two, follows the steps described in Section 2.2: simulation of the available income for each household in the census is obtained as in (3). With regard to the residual terms we must remember that in our application only the household error component is significant, so the simulation will regard only the component $e_{c,h}$. This residual component has been tested for normal distribution, but the results of the tests on normality (Shapiro-Wilk, Kolmogorov-Smirnov and Cramer-Von Mises) lead to the rejection of the null hypothesis. Given that evidence, any assumption of any specific distributional form has been avoided by drawing directly $\tilde{\varepsilon}_{c,h}$ from the estimated residuals for each household.

The full set of simulated $\hat{y}_{c,h}$ is used to calculate the expected value and standard deviation of each of the poverty measures considered (see Section 5), at the area level chosen. In practice 100 distributions of the available household income have been simulated and for each income distribution a set of poverty/inequality measures have

been estimated: the average values over the set of simulation is the estimated index and the standard deviation over all the simulation is the estimated standard error of the index. Something new, with respect to the previous Poverty Mapping application, has been attempted. As already mentioned, in the previous applications conducted in developing countries, the poverty line, used to compute poverty/inequality indexes, was a fixed value; in this application the poverty line is computed for each income distribution simulated, so that the computed indexes are really relative, being function of each simulated income distribution.

5. Poverty Mapping results

Poverty and inequality measures have been estimated at three geographical levels: the 10 provinces, the 43 so-defined Local Economic Systems (SEL) and the 273 Municipalities in Tuscany. Quite a relative concept of poverty has been chosen in this work, consistent with the wealthy society that Tuscany is. The poverty line has been defined as 60% of the median equivalised⁵ income of the distribution at Regional level; the poverty and inequality indices chosen, within with the mean equivalised income, are: the Head Count ratio, the Relative Poverty gap Ratio (FGT(1)), the severity index (FGT(2)), the Sen index, the Gini concentration index for the whole population and among the poor, and the two inequality indices of Generalised Entropy with degrees 0 and 1 (Theil index).

The percentage of poor individuals in Tuscany results as being equal to 17.74%. From Table 2 we can observe that in the Provinces of Livorno Massa Carrara and Grosseto poverty is more diffused, intense and severe. In fact, these three provinces not only show the highest percentage of poor people, but the equivalised incomes of these people are also quite far, in average, from the regional poverty line. On the other hand, the lowest poverty indices are in the provinces of Firenze, Siena and Arezzo. As far as measures of inequality are concerned (Table 3), the three worse off provinces of Livorno, Massa Carrara and Grosseto also are the most unequal; alternatively, incomes are distributed more equally in the four provinces of Arezzo, Pistoia, Prato and Siena.

Table 2. Poverty measures at Province level.

	HCR		FGT(1)		FGT(2)		Indice di SEN		Mean equivalised income	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error
MASSA	0.2228	0.0095	0.0590	0.0039	0.0237	0.0019	0.0435	0.0032	15670	202
LUCCA	0.1903	0.0079	0.0497	0.0031	0.0201	0.0015	0.0357	0.0025	16449	232
PISTOIA	0.1928	0.0085	0.0492	0.0031	0.0188	0.0015	0.0345	0.0026	15939	275
FIRENZE	0.1345	0.0068	0.0330	0.0024	0.0124	0.0012	0.0216	0.0018	18655	302
LIVORNO	0.2254	0.0092	0.0604	0.0038	0.0245	0.0019	0.0447	0.0032	15672	198
PISA	0.1871	0.0075	0.0492	0.0030	0.0199	0.0015	0.0351	0.0024	16712	230
AREZZO	0.1778	0.0080	0.0457	0.0030	0.0179	0.0015	0.0318	0.0025	16267	277
SIENA	0.1495	0.0136	0.0374	0.0041	0.0142	0.0018	0.0250	0.0032	17600	600
GROSSETO	0.2053	0.0091	0.0541	0.0035	0.0220	0.0017	0.0395	0.0029	15917	220
PRATO	0.1933	0.0087	0.0505	0.0033	0.0199	0.0018	0.0358	0.0028	15939	279
TUSCANY	0.1774	0.0043	0.0457	0.0018	0.0180	0.0010	0.0319	0.0015	16910	154

⁵ Equivalised income is defined as the total disposable household income divided by equivalent household size, and ascribed to each member of the household. The scale adopted in this work consists in the so-called modified OECD scale, which assigns value 1 to the first adult, value 0.50 to any subsequent adult, and value 0.30 to any children aged 14 years or less.

Table 3. Inequality measures at Province level.

	Gini		Gini of the poor		GE(0)		GE(1) = Theil	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error
MASSA	0.3107	0.0059	0.1445	0.0039	0.1632	0.0064	0.1630	0.0064
LUCCA	0.3059	0.0054	0.1448	0.0040	0.1595	0.0060	0.1580	0.0058
PISTOIA	0.2988	0.0040	0.1362	0.0037	0.1505	0.0042	0.1562	0.0042
FIRENZE	0.3056	0.0041	0.1321	0.0044	0.1586	0.0046	0.1633	0.0044
LIVORNO	0.3124	0.0056	0.1463	0.0038	0.1654	0.0062	0.1645	0.0061
PISA	0.3086	0.0054	0.1452	0.0037	0.1618	0.0060	0.1607	0.0059
AREZZO	0.2964	0.0037	0.1395	0.0043	0.1500	0.0044	0.1541	0.0039
SIENA	0.2998	0.0037	0.1341	0.0040	0.1530	0.0042	0.1574	0.0040
GROSSETO	0.3051	0.0053	0.1462	0.0040	0.1582	0.0058	0.1571	0.0056
PRATO	0.2989	0.0038	0.1415	0.0046	0.1520	0.0044	0.1560	0.0039
TUSCANY	0.3069	0.0034	0.1406	0.0028	0.1601	0.0038	0.1624	0.0037

Table 4 shows poverty measures and their corresponding standard errors disaggregated at SEL level. Areas at higher risk of poverty are Massa, Livorno, Arcipelago, Colline Metallifere, Val di Cecina and Lunigiana, while the better off areas are all concentrated in the large area between Siena and Florence known world-wide as *Chiantishire*: Area Urbana Fiorentina, Area Urbana Senese, Chianti Fiorentino, Area Urbana Empolese, Valdarno Nord and Chianti Senese.

These SELs also present the highest levels of mean equivalised income, which indicates the high (negative) correlation between relative poverty and income levels (see also European Commission, 2003). This strong relationship is no longer valid when comparing levels of income and inequality: the emblematic case is the town of Florence, which presents both the highest level of mean equivalised income and the highest inequality level (Gini equal to 31.77, Table 5).

The maps in Figure 1, reported for a better understanding of the results, show the distribution of the mean equivalised income and the diffusion of poverty in the 43 SELs in Tuscany. The picture shows that, even if Tuscany is in general a wealthy Region, a clear net distinction between the eastern and central areas on one side and the coastal areas on the other. Apart from the already cited Chianti area, it is evident that the wealthy SELs collocate along the entire course of the Arno River, characterised by a well developed manufacturing sector.

This picture is confirmed by analysing the two maps reported in Figure 2; they show the mean equivalised income and the percentage of poor people disaggregated at municipality level. The complete list of poverty and inequality measures and their corresponding standard errors, calculated for all the 273 municipalities in Tuscany, are reported in the Annex in Tables from A1 to A20.

Table 4. Poverty measures at SEL level.

	HCR		FGT(1)		FGT(2)		Indice di SEN		Mean equivalised income	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Point estimate	Standard error	Point estimate	Standard error	Point estimate
Alta Val d'Elsa	0.1698	0.0142	0.0438	0.0047	0.0168	0.0022	0.0297	0.0038	17034	549
Amiata - Val d'Orcia	0.1483	0.0149	0.0357	0.0041	0.0132	0.0018	0.0239	0.0033	16899	575
Amiata grossetano	0.1871	0.0110	0.0473	0.0038	0.0186	0.0018	0.0338	0.0031	16020	260
Arcipelago	0.2451	0.0107	0.0664	0.0045	0.0270	0.0023	0.0500	0.0039	15025	222
Area aretina	0.1679	0.0075	0.0423	0.0028	0.0162	0.0014	0.0290	0.0023	16743	286
Area grossetana	0.1914	0.0082	0.0503	0.0031	0.0205	0.0016	0.0363	0.0026	16460	225
Area livornese	0.2324	0.0101	0.0630	0.0042	0.0257	0.0021	0.0468	0.0035	15724	210
Area lucchese	0.1726	0.0074	0.0450	0.0028	0.0181	0.0014	0.0317	0.0023	17060	254
Area pisana	0.1846	0.0078	0.0485	0.0031	0.0195	0.0015	0.0343	0.0025	17139	253
Area pratese	0.1933	0.0087	0.0505	0.0033	0.0199	0.0018	0.0358	0.0028	15939	279
Area urbana empolese (Q)	0.1338	0.0079	0.0333	0.0028	0.0127	0.0014	0.0219	0.0022	18131	330
Area urbana fiorentina (Q)	0.1314	0.0070	0.0323	0.0024	0.0123	0.0012	0.0212	0.0019	18365	313
Area urbana pistoiese (Q)	0.1919	0.0085	0.0489	0.0031	0.0187	0.0015	0.0343	0.0026	16040	279
Area urbana senese	0.1227	0.0123	0.0288	0.0035	0.0103	0.0014	0.0184	0.0025	19087	660
Bassa Val d'Elsa (Q)	0.1391	0.0081	0.0358	0.0029	0.0142	0.0015	0.0240	0.0023	17847	343
Casentino	0.1924	0.0078	0.0501	0.0031	0.0196	0.0017	0.0353	0.0026	15815	271
Chianti fiorentino (Q)	0.1265	0.0073	0.0299	0.0024	0.0109	0.0011	0.0193	0.0018	18585	323
Chianti senese	0.1425	0.0141	0.0357	0.0042	0.0142	0.0019	0.0243	0.0033	18021	634
Colline dell'Albegna (Q)	0.1908	0.0119	0.0488	0.0040	0.0196	0.0020	0.0354	0.0034	15918	306
Colline metallifere	0.2224	0.0100	0.0594	0.0039	0.0243	0.0020	0.0441	0.0033	15473	209
Costa d'argento (Q)	0.2384	0.0119	0.0641	0.0047	0.0262	0.0024	0.0483	0.0041	14991	252
Crete senesi	0.1615	0.0146	0.0423	0.0046	0.0169	0.0022	0.0291	0.0038	16952	571
Firenze	0.1344	0.0066	0.0326	0.0023	0.0121	0.0011	0.0213	0.0017	19444	307
Garfagnana (Q)	0.2014	0.0094	0.0516	0.0033	0.0205	0.0016	0.0375	0.0027	15555	233
Lunigiana	0.2046	0.0083	0.0535	0.0034	0.0214	0.0017	0.0388	0.0028	15826	200
Massa Carrara	0.2300	0.0102	0.0611	0.0041	0.0246	0.0020	0.0454	0.0035	15609	212
Montagna pistoiese (Q)	0.1705	0.0086	0.0412	0.0027	0.0151	0.0013	0.0281	0.0022	15863	284
Mugello (Q)	0.1523	0.0080	0.0384	0.0029	0.0149	0.0014	0.0259	0.0023	17619	313
Val Tiberina	0.1697	0.0080	0.0436	0.0030	0.0171	0.0016	0.0302	0.0025	16380	282
Val d'Era	0.1846	0.0075	0.0482	0.0028	0.0194	0.0014	0.0343	0.0023	16472	238
Val di Chiana aretina	0.1864	0.0107	0.0485	0.0039	0.0192	0.0020	0.0343	0.0033	15901	305
Val di Chiana senese	0.1482	0.0137	0.0369	0.0041	0.0140	0.0018	0.0247	0.0032	17286	598
Val di Cornia	0.2125	0.0092	0.0560	0.0034	0.0226	0.0017	0.0410	0.0029	15743	205
Val di Merse	0.1677	0.0155	0.0435	0.0049	0.0169	0.0023	0.0297	0.0041	17080	617
Val di Nievole	0.1970	0.0089	0.0507	0.0033	0.0195	0.0016	0.0357	0.0027	15820	276
Val di Serchio (Q)	0.1918	0.0084	0.0498	0.0031	0.0200	0.0015	0.0358	0.0025	16010	248
Val di Sieve (Q)	0.1371	0.0078	0.0332	0.0027	0.0123	0.0013	0.0218	0.0021	17889	323
Val di cecina costa (Q)	0.2100	0.0084	0.0549	0.0033	0.0220	0.0017	0.0401	0.0027	15762	200
Val di cecina interno (Q)	0.2100	0.0093	0.0563	0.0037	0.0233	0.0019	0.0415	0.0031	15766	236
Valdarno Nord (Q)	0.1307	0.0081	0.0318	0.0026	0.0119	0.0013	0.0208	0.0021	18149	321
Valdarno Sud	0.1838	0.0085	0.0476	0.0031	0.0189	0.0016	0.0336	0.0026	15956	274
Valdarno inferiore	0.1872	0.0088	0.0495	0.0033	0.0201	0.0017	0.0353	0.0028	16344	272
Versilia	0.2047	0.0088	0.0539	0.0035	0.0219	0.0018	0.0393	0.0029	16115	230
Tuscany	0.1774	0.0043	0.0457	0.0018	0.0180	0.0010	0.0319	0.0015	16910	154

Table 5. Inequality measures at SEL level.

	Gini		Gini of the poor		GE(0)		GE(1) = Theil	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Point estimate	Standard error	Point estimate
Alta Val d'Elsa	0.3016	0.0040	0.1366	0.0049	0.1542	0.0045	0.1585	0.0046
Amiata - Val d'Orcia	0.2880	0.0042	0.1293	0.0046	0.1399	0.0042	0.1459	0.0046
Amiata grossetano	0.2949	0.0058	0.1396	0.0050	0.1470	0.0060	0.1469	0.0062
Arcipelago	0.3101	0.0062	0.1472	0.0046	0.1627	0.0068	0.1620	0.0067
Area aretina	0.2992	0.0040	0.1360	0.0043	0.1512	0.0044	0.1569	0.0044
Area grossetana	0.3069	0.0055	0.1464	0.0042	0.1602	0.0060	0.1589	0.0058
Area livornese	0.3180	0.0061	0.1474	0.0039	0.1715	0.0068	0.1705	0.0067
Area lucchese	0.3052	0.0055	0.1447	0.0043	0.1585	0.0060	0.1573	0.0059
Area pisana	0.3150	0.0059	0.1443	0.0038	0.1681	0.0065	0.1672	0.0065
Area pratese	0.2989	0.0038	0.1415	0.0046	0.1520	0.0044	0.1560	0.0039
Area urbana empolese (Q)	0.2951	0.0040	0.1342	0.0055	0.1482	0.0046	0.1525	0.0044
Area urbana fiorentina (Q)	0.2977	0.0039	0.1334	0.0051	0.1510	0.0045	0.1553	0.0042
Area urbana pistoiese (Q)	0.3005	0.0042	0.1360	0.0040	0.1522	0.0044	0.1579	0.0046
Area urbana senese	0.3037	0.0046	0.1245	0.0035	0.1545	0.0048	0.1609	0.0054
Bassa Val d'Elsa (Q)	0.2932	0.0042	0.1414	0.0057	0.1483	0.0049	0.1508	0.0049
Casentino	0.2965	0.0042	0.1403	0.0051	0.1491	0.0046	0.1542	0.0053
Chianti fiorentino (Q)	0.2994	0.0042	0.1263	0.0046	0.1507	0.0045	0.1572	0.0050
Chianti senese	0.3040	0.0058	0.1393	0.0057	0.1728	0.0090	0.1627	0.0074
Colline dell'Albegna (Q)	0.2958	0.0061	0.1435	0.0051	0.1488	0.0063	0.1482	0.0065
Colline metallifere	0.3063	0.0058	0.1476	0.0047	0.1596	0.0065	0.1584	0.0063
Costa d'argento (Q)	0.3053	0.0056	0.1479	0.0048	0.1584	0.0062	0.1573	0.0061
Crete senesi	0.2964	0.0050	0.1431	0.0056	0.1512	0.0056	0.1541	0.0062
Firenze	0.3177	0.0048	0.1299	0.0038	0.1700	0.0053	0.1755	0.0053
Garfagnana (Q)	0.2942	0.0051	0.1417	0.0044	0.1467	0.0052	0.1462	0.0054
Lunigiana	0.3019	0.0054	0.1436	0.0044	0.1545	0.0058	0.1537	0.0056
Massa Carrara	0.3142	0.0062	0.1448	0.0039	0.1667	0.0068	0.1667	0.0068
Montagna pistoiese (Q)	0.2817	0.0045	0.1290	0.0044	0.1337	0.0044	0.1397	0.0055
Mugello (Q)	0.3000	0.0041	0.1366	0.0051	0.1625	0.0060	0.1573	0.0045
Val Tiberina	0.2924	0.0045	0.1401	0.0051	0.1461	0.0050	0.1498	0.0052
Val d'Era	0.3017	0.0052	0.1445	0.0038	0.1547	0.0056	0.1536	0.0056
Val di Chiana aretina	0.2947	0.0046	0.1419	0.0056	0.1486	0.0054	0.1524	0.0052
Val di Chiana senese	0.2934	0.0037	0.1341	0.0045	0.1460	0.0040	0.1512	0.0040
Val di Cornia	0.3057	0.0055	0.1451	0.0041	0.1583	0.0060	0.1576	0.0058
Val di Merse	0.3034	0.0050	0.1390	0.0065	0.1561	0.0056	0.1609	0.0067
Val di Nievole	0.2988	0.0041	0.1373	0.0038	0.1508	0.0045	0.1563	0.0045
Val di Serchio (Q)	0.2973	0.0055	0.1437	0.0045	0.1502	0.0058	0.1490	0.0060
Val di Sieve (Q)	0.2936	0.0041	0.1296	0.0052	0.1459	0.0045	0.1511	0.0045
Val di cecina costa (Q)	0.3041	0.0052	0.1438	0.0038	0.1566	0.0056	0.1560	0.0055
Val di cecina interno (Q)	0.3042	0.0058	0.1494	0.0049	0.1589	0.0064	0.1560	0.0063
Valdarno Nord (Q)	0.2947	0.0044	0.1311	0.0052	0.1469	0.0047	0.1524	0.0053
Valdarno Sud	0.2935	0.0038	0.1419	0.0043	0.1500	0.0048	0.1513	0.0042
Valdarno inferiore	0.3010	0.0055	0.1462	0.0045	0.1544	0.0060	0.1528	0.0058
Versilia	0.3090	0.0058	0.1456	0.0042	0.1634	0.0064	0.1613	0.0063
Tuscany	0.3069	0.0034	0.1406	0.0028	0.1601	0.0038	0.1624	0.0037

Figure. 1. Mean equivalised income and Head Count Ratio at SEL level

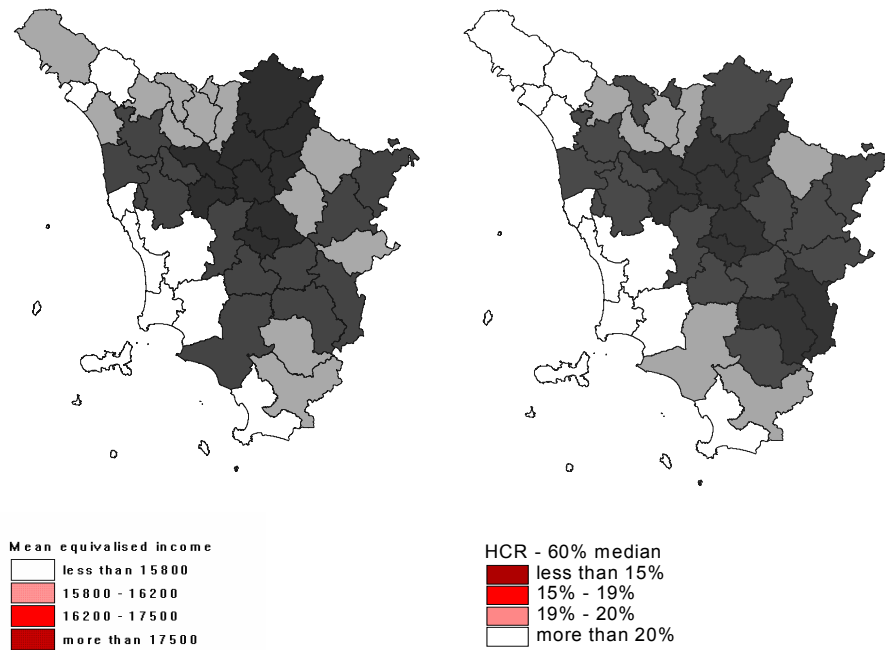


Figure. 2. Mean equivalised income and Head Count Ratio at commune level

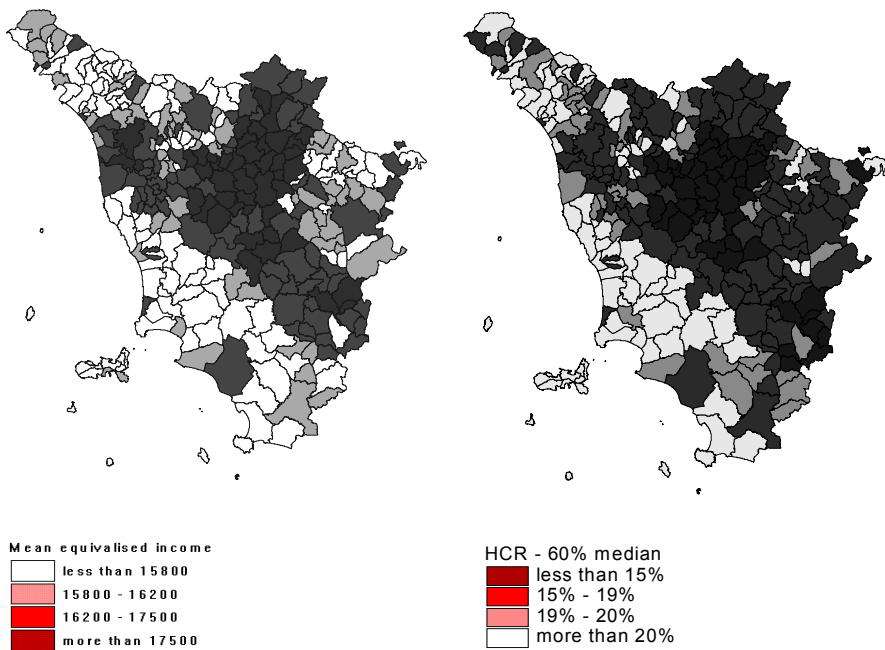


Table 6 reports decomposition of one of the general entropy class inequality measures (GE(1), Theil Index) into its within area and between area components at various levels of aggregation. By definition, all of the inequality is within group when the group in question is the whole of Tuscany, and all of it is between groups when each

household is considered as a separate group. GE(1) index is decomposable so that we are able to distinguish among the inequality due to differences between a certain level of disaggregated areas (Provinces, SELs, Municipalities, etc...) and the inequality due to the differences between households present in the disaggregated area. From Table 6 we can see that in Tuscany, a large portion of the inequality is due to within-group inequality, even when the groups are relatively small, such as Municipalities.

Table 6. Inequality decomposition

Level	Units	GE(0)			GE(1) = Theil		
		Within group inequality	Between group inequality	% between group	Within group inequality	Between group inequality	% between group
Tuscany	1	0.1601	0	0	0.1624	0	0
Provinces	10	0.1578	0.0023	1.4400	0.1601	0.0023	1.4588
SELs	43	0.1577	0.0024	1.5044	0.1599	0.0025	1.5732
Municipalities	287	0.1575	0.0026	1.6380	0.1596	0.0028	1.7284

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Annex: Poverty and inequality measures at Municipality level

Table A.1. Poverty measures at Municipality level, Province of Firenze

	HCR		FGT(1)		FGT(2)		SEN		Mean equivalised income	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Point estimate	Standard error	Point estimate	Standard error	Point estimate
BAGNO A RIPOLI	0.1107	0.0064	0.0252	0.0019	0.0088	0.0009	0.0158	0.0014	19631	340
BARBERINO DI MUGELLO	0.1510	0.0098	0.0372	0.0033	0.0139	0.0016	0.0248	0.0026	17377	347
BARBERINO VAL D'ELSA	0.1405	0.0131	0.0350	0.0042	0.0132	0.0021	0.0230	0.0032	18222	424
BORGO SAN LORENZO	0.1510	0.0087	0.0381	0.0030	0.0146	0.0016	0.0255	0.0024	17605	325
CALENZANO	0.1215	0.0084	0.0297	0.0028	0.0114	0.0015	0.0195	0.0022	18470	347
CAMPI BISENZIO	0.1543	0.0091	0.0409	0.0035	0.0168	0.0020	0.0283	0.0030	17408	349
CAPRAIA E LIMITE	0.1191	0.0107	0.0295	0.0035	0.0113	0.0019	0.0192	0.0027	18345	423
CASTELFIORENTINO	0.1535	0.0088	0.0409	0.0032	0.0166	0.0017	0.0279	0.0026	17452	349
CERRETO GUIDI	0.1230	0.0099	0.0302	0.0033	0.0116	0.0017	0.0198	0.0026	17985	384
CERTALDO	0.1299	0.0088	0.0330	0.0031	0.0131	0.0016	0.0220	0.0023	18057	363
DICOMANO	0.1634	0.0128	0.0410	0.0042	0.0154	0.0022	0.0275	0.0035	17041	318
EMPOLI	0.1321	0.0076	0.0324	0.0027	0.0121	0.0013	0.0211	0.0020	18383	329
FIESOLE	0.1005	0.0071	0.0223	0.0021	0.0077	0.0009	0.0138	0.0015	20079	376
FIGLINE VALDARNO	0.1292	0.0081	0.0310	0.0026	0.0113	0.0012	0.0199	0.0020	18154	327
FIRENZE	0.1344	0.0066	0.0326	0.0023	0.0121	0.0011	0.0213	0.0017	19444	307
FIRENZUOLA	0.1568	0.0108	0.0406	0.0040	0.0160	0.0022	0.0275	0.0032	17243	356
FUCECCHIO	0.1597	0.0092	0.0416	0.0035	0.0165	0.0019	0.0284	0.0028	17432	330
GAMBASSI TERME	0.1223	0.0104	0.0289	0.0029	0.0104	0.0014	0.0184	0.0022	18304	440
GREVE IN CHIANTI	0.1358	0.0084	0.0341	0.0031	0.0132	0.0017	0.0226	0.0024	18483	371
IMPRUNETA	0.1193	0.0076	0.0271	0.0023	0.0094	0.0010	0.0172	0.0017	18971	330
INCISA IN VAL D'ARNO	0.1372	0.0118	0.0350	0.0036	0.0138	0.0018	0.0234	0.0029	17798	392
LASTRA A SIGNA	0.1433	0.0089	0.0347	0.0029	0.0128	0.0014	0.0228	0.0022	17680	330
LONDA	0.1294	0.0152	0.0299	0.0045	0.0104	0.0021	0.0189	0.0032	18269	556
MARRADI	0.1789	0.0121	0.0444	0.0041	0.0166	0.0022	0.0304	0.0034	16683	372
MONTAIONE	0.1327	0.0119	0.0329	0.0040	0.0126	0.0021	0.0217	0.0032	18236	462
MONTELUPO FIORENTINO	0.1196	0.0094	0.0281	0.0028	0.0102	0.0014	0.0180	0.0022	18094	388
MONTESPERTOLI	0.1451	0.0100	0.0364	0.0035	0.0138	0.0018	0.0241	0.0028	18034	373
PALAZZUOLO SUL SENIO	0.1591	0.0174	0.0372	0.0050	0.0132	0.0026	0.0247	0.0038	17024	440
PELAGO	0.1291	0.0098	0.0307	0.0031	0.0112	0.0015	0.0198	0.0023	17966	369
PONTASSIEVE	0.1351	0.0080	0.0329	0.0026	0.0123	0.0013	0.0216	0.0020	18050	341
REGGELLO	0.1303	0.0095	0.0315	0.0029	0.0118	0.0014	0.0206	0.0022	18028	351
RIGNANO SULL'ARNO	0.1300	0.0098	0.0321	0.0033	0.0121	0.0017	0.0209	0.0026	18620	391
RUFINA	0.1305	0.0093	0.0310	0.0031	0.0113	0.0015	0.0201	0.0023	17948	384
SAN CASCIANO IN VAL DI PESA	0.1247	0.0083	0.0287	0.0026	0.0101	0.0012	0.0184	0.0019	18432	343
SAN GODENZO	0.1575	0.0165	0.0379	0.0053	0.0138	0.0026	0.0252	0.0039	17297	524
SAN PIERO A SIEVE	0.1796	0.0128	0.0465	0.0046	0.0177	0.0024	0.0314	0.0037	16854	359
SCANDICCI	0.1311	0.0068	0.0315	0.0023	0.0118	0.0011	0.0207	0.0017	18123	307
SCARPERIA	0.1554	0.0104	0.0397	0.0039	0.0154	0.0021	0.0267	0.0031	17562	369
SESTO FIORENTINO	0.1228	0.0068	0.0299	0.0022	0.0113	0.0011	0.0195	0.0017	18756	324
SIGNA	0.1603	0.0097	0.0408	0.0036	0.0155	0.0018	0.0273	0.0028	17357	349
TAVARNELLE VAL DI PESA	0.1288	0.0101	0.0309	0.0033	0.0113	0.0015	0.0199	0.0024	18337	371
VAGLIA	0.0997	0.0077	0.0230	0.0026	0.0083	0.0013	0.0144	0.0018	20262	478
VICCHIO	0.1576	0.0113	0.0416	0.0036	0.0179	0.0017	0.0295	0.0028	17462	385
VINCI	0.1159	0.0090	0.0283	0.0030	0.0108	0.0015	0.0184	0.0023	18524	374
Province of Firenze	0.1345	0.0068	0.0330	0.0024	0.0124	0.0012	0.0216	0.0018	18655	302
Tuscany	0.1774	0.0043	0.0457	0.0018	0.0180	0.0010	0.0319	0.0015	16910	154

Table A.2. Poverty measures at Municipality level, Province of Arezzo

	HCR		FGT(1)		FGT(2)		SEN		Mean equivalised income	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Point estimate	Standard error	Point estimate	Standard error	Point estimate
ANGHIARI	0.1731	0.0119	0.0448	0.0043	0.0179	0.0024	0.0315	0.0036	16142	342
AREZZO	0.1660	0.0073	0.0417	0.0026	0.0159	0.0013	0.0285	0.0021	16981	293
BADIA TEDALDA	0.1368	0.0162	0.0308	0.0049	0.0106	0.0024	0.0199	0.0036	16521	528
BIBBIENA	0.1924	0.0080	0.0506	0.0031	0.0198	0.0017	0.0355	0.0026	16103	289
BUCINE	0.1707	0.0108	0.0424	0.0034	0.0161	0.0017	0.0292	0.0029	15981	305
CAPOLONA	0.1659	0.0131	0.0399	0.0043	0.0146	0.0021	0.0270	0.0035	16071	343
CAPRESE MICHELANGELO	0.1805	0.0170	0.0455	0.0055	0.0173	0.0029	0.0315	0.0044	15639	401
CASTEL FOCOGNANO	0.2057	0.0135	0.0546	0.0047	0.0218	0.0026	0.0392	0.0041	15279	383
CASTELFRANCO DI SOPRA	0.1738	0.0172	0.0425	0.0058	0.0159	0.0029	0.0292	0.0047	16270	428
CASTEL SAN NICCOLO'	0.1876	0.0138	0.0506	0.0046	0.0208	0.0027	0.0363	0.0041	15427	378
CASTIGLION FIBOCCHI	0.1792	0.0155	0.0502	0.0060	0.0214	0.0036	0.0359	0.0051	16170	405
CASTIGLION FIORENTINO	0.1941	0.0130	0.0502	0.0045	0.0200	0.0023	0.0360	0.0038	15727	346
CAVRIGLIA	0.1983	0.0112	0.0525	0.0040	0.0211	0.0022	0.0377	0.0034	15552	306
CHITIGNANO	0.1911	0.0221	0.0480	0.0070	0.0183	0.0036	0.0338	0.0055	15416	471
CHIUSI DELLA VERNA	0.1747	0.0150	0.0433	0.0053	0.0164	0.0028	0.0299	0.0042	15756	366
CIVITELLA IN VAL DI CHIANA	0.1710	0.0122	0.0431	0.0041	0.0166	0.0021	0.0299	0.0035	15952	347
CORTONA	0.1741	0.0103	0.0440	0.0036	0.0171	0.0019	0.0307	0.0031	16150	307
FOIANO DELLA CHIANA	0.2010	0.0122	0.0544	0.0045	0.0220	0.0024	0.0390	0.0039	15663	323
LATERINA	0.1998	0.0145	0.0530	0.0053	0.0219	0.0029	0.0387	0.0045	15420	392
LORO CIUFFENNA	0.1691	0.0107	0.0418	0.0037	0.0158	0.0019	0.0287	0.0030	16211	333
LUCIGNANO	0.2029	0.0148	0.0558	0.0059	0.0229	0.0034	0.0402	0.0053	15511	384
MARCIANO DELLA CHIANA	0.1865	0.0175	0.0490	0.0057	0.0192	0.0029	0.0341	0.0049	15881	439
MONTEMIGNAIO	0.1731	0.0255	0.0395	0.0074	0.0141	0.0038	0.0274	0.0062	15379	537
MONTERCHI	0.1600	0.0148	0.0377	0.0049	0.0136	0.0025	0.0254	0.0039	16329	437
MONTE SAN SAVINO	0.1755	0.0112	0.0449	0.0043	0.0175	0.0025	0.0313	0.0037	15861	321
MONTEVARCHI	0.1818	0.0088	0.0474	0.0033	0.0190	0.0017	0.0334	0.0027	16202	277
ORTIGNANO RAGGIOLO	0.1708	0.0224	0.0413	0.0069	0.0153	0.0036	0.0283	0.0054	15753	569
PERGINE VALDARNO	0.1615	0.0139	0.0428	0.0042	0.0195	0.0020	0.0316	0.0033	15831	412
PIAN DI SCO	0.1946	0.0138	0.0517	0.0053	0.0214	0.0029	0.0375	0.0045	15576	326
PIEVE SANTO STEFANO	0.1979	0.0138	0.0502	0.0045	0.0190	0.0022	0.0351	0.0038	15638	373
POPPI	0.2067	0.0103	0.0548	0.0040	0.0218	0.0023	0.0393	0.0035	15606	326
PRATOVECCHIO	0.1933	0.0130	0.0486	0.0044	0.0183	0.0021	0.0338	0.0034	15981	403
SAN GIOVANNI VALDARNO	0.1959	0.0084	0.0506	0.0032	0.0195	0.0017	0.0355	0.0027	15861	304
SANSEPOLCRO	0.1615	0.0079	0.0423	0.0029	0.0170	0.0016	0.0292	0.0024	16829	310
SESTINO	0.2075	0.0200	0.0534	0.0070	0.0204	0.0038	0.0379	0.0061	14962	415
STIA	0.1872	0.0124	0.0493	0.0047	0.0193	0.0026	0.0341	0.0039	16137	378
SUBBIANO	0.1815	0.0115	0.0463	0.0040	0.0178	0.0021	0.0321	0.0034	16114	339
TALLA	0.1664	0.0189	0.0400	0.0064	0.0147	0.0035	0.0273	0.0052	15952	488
TERRANUOVA BRACCIOLINI	0.1755	0.0102	0.0462	0.0037	0.0188	0.0019	0.0327	0.0030	16061	315
Province of Arezzo	0.1778	0.0080	0.0457	0.0030	0.0179	0.0015	0.0318	0.0025	16267	277
Tuscany	0.1774	0.0043	0.0457	0.0018	0.0180	0.0010	0.0319	0.0015	16910	154

Table A.3. Poverty measures at Municipality level, Province of Grosseto

	HCR		FGT(1)		FGT(2)		SEN		Mean equivalised income	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Point estimate	Standard error	Point estimate	Standard error	Point estimate
ARCIDOSSO	0.1910	0.0126	0.0506	0.0045	0.0206	0.0024	0.0363	0.0036	16153	307
CAMPAGNATICO	0.1995	0.0203	0.0524	0.0066	0.0215	0.0033	0.0384	0.0057	15650	503
CAPALBIO	0.2090	0.0169	0.0532	0.0061	0.0209	0.0032	0.0388	0.0052	15205	405
CASTEL DEL PIANO	0.1711	0.0120	0.0432	0.0039	0.0169	0.0020	0.0302	0.0031	16762	306
CASTELL'AZZARA	0.1935	0.0165	0.0466	0.0052	0.0177	0.0026	0.0334	0.0042	15558	352
CASTIGLIONE DELLA PESCAIA	0.1949	0.0113	0.0508	0.0041	0.0205	0.0022	0.0368	0.0035	16090	307
CINIGIANO	0.2150	0.0219	0.0552	0.0075	0.0221	0.0038	0.0411	0.0066	14979	452
CIVITELLA PAGANICO	0.2136	0.0156	0.0575	0.0059	0.0239	0.0035	0.0427	0.0053	15312	337
FOLLONICA	0.2146	0.0105	0.0566	0.0041	0.0228	0.0021	0.0415	0.0034	15844	222
GAVORRANO	0.2413	0.0120	0.0652	0.0047	0.0268	0.0027	0.0494	0.0042	14680	256
GROSSETO	0.1848	0.0077	0.0484	0.0029	0.0196	0.0014	0.0346	0.0023	16769	228
ISOLA DEL GIGLIO	0.2219	0.0221	0.0548	0.0080	0.0213	0.0043	0.0408	0.0071	14970	414
MAGLIANO IN TOSCANA	0.2044	0.0212	0.0525	0.0073	0.0211	0.0037	0.0386	0.0064	15406	473
MANCIANO	0.1811	0.0137	0.0457	0.0046	0.0180	0.0023	0.0326	0.0038	16200	365
MASSA MARITTIMA	0.2121	0.0122	0.0556	0.0043	0.0223	0.0022	0.0407	0.0037	15691	259
MONTE ARGENTARIO	0.2702	0.0142	0.0737	0.0056	0.0303	0.0029	0.0573	0.0051	14263	255
MONTIERI	0.2569	0.0191	0.0705	0.0079	0.0294	0.0046	0.0545	0.0073	14213	378
ORBETELLO	0.2296	0.0121	0.0628	0.0047	0.0260	0.0024	0.0469	0.0041	15437	269
PITIGLIANO	0.1914	0.0131	0.0486	0.0043	0.0193	0.0022	0.0350	0.0035	16035	306
ROCCALBEGNA	0.2000	0.0228	0.0498	0.0072	0.0193	0.0039	0.0359	0.0060	15344	492
ROCCASTRADA	0.2301	0.0137	0.0617	0.0052	0.0255	0.0028	0.0466	0.0046	14951	251
SANTA FIORA	0.1835	0.0131	0.0453	0.0044	0.0175	0.0023	0.0321	0.0037	16077	315
SCANSANO	0.1983	0.0163	0.0520	0.0056	0.0217	0.0030	0.0386	0.0049	15686	408
SCARLINO	0.2218	0.0153	0.0593	0.0057	0.0240	0.0030	0.0436	0.0049	15465	294
SEGGIANO	0.1653	0.0168	0.0402	0.0056	0.0156	0.0031	0.0282	0.0045	16476	458
SORANO	0.1988	0.0138	0.0509	0.0048	0.0205	0.0026	0.0373	0.0041	15560	338
MONTEROTONDO MARITTIMO	0.2697	0.0216	0.0845	0.0085	0.0420	0.0057	0.0703	0.0084	14110	359
SEMPRONIANO	0.1721	0.0173	0.0416	0.0063	0.0157	0.0031	0.0289	0.0048	16143	466
Province of Grosseto	0.2053	0.0091	0.0541	0.0035	0.0220	0.0017	0.0395	0.0029	15917	220
Tuscany	0.1774	0.0043	0.0457	0.0018	0.0180	0.0010	0.0319	0.0015	16910	154

Table A.4. Poverty measures at Municipality level, Province of Prato

	HCR		FGT(1)		FGT(2)		SEN		Mean equivalised income	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Point estimate	Standard error	Point estimate	Standard error	Point estimate
CANTAGALLO	0.1906	0.0133	0.0479	0.0047	0.0181	0.0025	0.0335	0.0040	15492	368
CARMIGNANO	0.1904	0.0110	0.0497	0.0040	0.0203	0.0021	0.0358	0.0034	15906	335
MONTEMURLO	0.2094	0.0110	0.0556	0.0042	0.0222	0.0023	0.0402	0.0037	15240	311
POGGIO A CAIANO	0.1830	0.0116	0.0464	0.0042	0.0180	0.0022	0.0326	0.0034	16187	351
PRATO	0.1946	0.0086	0.0511	0.0033	0.0202	0.0017	0.0362	0.0028	15994	276
VAIANO	0.1557	0.0095	0.0373	0.0030	0.0137	0.0015	0.0251	0.0024	16460	346
VERNIO	0.1850	0.0114	0.0468	0.0036	0.0179	0.0019	0.0327	0.0032	15509	343
Province of Prato	0.1933	0.0087	0.0505	0.0033	0.0199	0.0018	0.0358	0.0028	15939	279
Tuscany	0.1774	0.0043	0.0457	0.0018	0.0180	0.0010	0.0319	0.0015	16910	154

Table A.5. Poverty measures at Municipality level, Province of Livorno

	HCR		FGT(1)		FGT(2)		SEN		Mean equivalised income	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Point estimate	Standard error	Point estimate	Standard error	Point estimate
BIBBONA	0.2075	0.0146	0.0542	0.0053	0.0216	0.0029	0.0392	0.0044	15685	333
CAMPIGLIA MARITTIMA	0.2040	0.0108	0.0531	0.0036	0.0213	0.0018	0.0386	0.0030	15724	254
CAMPO NELL'ELBA	0.2418	0.0141	0.0636	0.0051	0.0255	0.0028	0.0480	0.0046	14817	294
CAPOLIVERI	0.2057	0.0136	0.0539	0.0053	0.0216	0.0028	0.0391	0.0045	16039	339
CAPRAIA ISOLA	0.2473	0.0328	0.0683	0.0130	0.0279	0.0073	0.0511	0.0113	15396	681
CASTAGNETO CARDUCCI	0.2239	0.0125	0.0602	0.0048	0.0250	0.0026	0.0451	0.0042	15188	266
CECINA	0.2054	0.0087	0.0538	0.0035	0.0216	0.0018	0.0390	0.0029	16086	216
COLLESALVETTI	0.2030	0.0104	0.0530	0.0040	0.0213	0.0021	0.0385	0.0033	15670	243
LIVORNO	0.2354	0.0103	0.0641	0.0043	0.0262	0.0022	0.0477	0.0036	15729	213
MARCIANA	0.2072	0.0170	0.0501	0.0050	0.0191	0.0025	0.0366	0.0043	15244	360
MARCIANA MARINA	0.2124	0.0162	0.0553	0.0058	0.0221	0.0031	0.0405	0.0047	15508	407
PIOMBINO	0.2210	0.0098	0.0589	0.0038	0.0239	0.0019	0.0434	0.0032	15678	208
PORTO AZZURRO	0.2840	0.0180	0.0815	0.0070	0.0341	0.0037	0.0632	0.0062	14322	287
PORTOFERRAIO	0.2523	0.0114	0.0701	0.0053	0.0289	0.0028	0.0529	0.0045	15119	250
RIO MARINA	0.2610	0.0186	0.0680	0.0074	0.0268	0.0039	0.0519	0.0064	14219	340
RIO NELL'ELBA	0.2958	0.0249	0.0837	0.0091	0.0353	0.0051	0.0669	0.0090	13902	431
ROSIGNANO MARITTIMO	0.2104	0.0087	0.0545	0.0033	0.0217	0.0016	0.0398	0.0027	15645	200
SAN VINCENZO	0.1860	0.0099	0.0472	0.0034	0.0187	0.0018	0.0338	0.0027	16241	267
SASSETTA	0.2893	0.0318	0.0865	0.0117	0.0375	0.0070	0.0677	0.0116	14241	520
SUVERETO	0.1955	0.0137	0.0488	0.0048	0.0192	0.0027	0.0354	0.0042	15740	359
Province of Livorno	0.2254	0.0092	0.0604	0.0038	0.0245	0.0019	0.0447	0.0032	15672	198
Tuscany	0.1774	0.0043	0.0457	0.0018	0.0180	0.0010	0.0319	0.0015	16910	154

Table A.6. Poverty measures at Municipality level, Province of Massa

	HCR		FGT(1)		FGT(2)		SEN		Mean equivalised income	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Point estimate	Standard error	Point estimate	Standard error	Point estimate
AULLA	0.2211	0.0097	0.0594	0.0041	0.0241	0.0023	0.0437	0.0035	15547	231
BAGNONE	0.1856	0.0144	0.0464	0.0051	0.0181	0.0028	0.0331	0.0043	16012	344
CARRARA	0.2411	0.0110	0.0648	0.0044	0.0262	0.0022	0.0485	0.0038	15486	222
CASOLA IN LUNIGIANA	0.2073	0.0165	0.0530	0.0059	0.0209	0.0032	0.0385	0.0050	15280	379
COMANO	0.1660	0.0189	0.0426	0.0061	0.0174	0.0041	0.0303	0.0055	16764	549
FILATTIERA	0.1991	0.0145	0.0528	0.0052	0.0214	0.0030	0.0380	0.0045	15842	316
FIVIZZANO	0.1979	0.0099	0.0504	0.0036	0.0199	0.0019	0.0364	0.0030	15743	218
FOSDINOVO	0.2057	0.0139	0.0535	0.0049	0.0214	0.0025	0.0390	0.0042	16067	257
LICCIANA NARDI	0.2151	0.0122	0.0570	0.0050	0.0228	0.0027	0.0415	0.0041	15593	279
MASSA	0.2198	0.0101	0.0578	0.0040	0.0232	0.0020	0.0425	0.0034	15734	211
MONTIGNOSO	0.2249	0.0110	0.0593	0.0042	0.0237	0.0021	0.0437	0.0034	15578	263
MULAZZO	0.1742	0.0146	0.0424	0.0044	0.0164	0.0024	0.0299	0.0037	16088	352
PODENZANA	0.1876	0.0161	0.0483	0.0062	0.0192	0.0035	0.0343	0.0052	16406	427
PONTREMOLI	0.2043	0.0110	0.0537	0.0043	0.0215	0.0023	0.0387	0.0037	16172	258
TRESANA	0.1941	0.0142	0.0509	0.0059	0.0205	0.0033	0.0364	0.0047	15889	347
VILAFRANCA IN LUNIGIANA	0.2228	0.0136	0.0600	0.0056	0.0244	0.0029	0.0442	0.0046	15533	298
ZERI	0.1786	0.0164	0.0447	0.0051	0.0177	0.0030	0.0320	0.0044	15722	448
Province of Massa	0.2228	0.0095	0.0590	0.0039	0.0237	0.0019	0.0435	0.0032	15670	202
Tuscany	0.1774	0.0043	0.0457	0.0018	0.0180	0.0010	0.0319	0.0015	16910	154

Table A.7. Poverty measures at Municipality level, Province of Lucca

	HCR		FGT(1)		FGT(2)		SEN		Mean equivalised income	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Point estimate	Standard error	Point estimate	Standard error	Point estimate
ALTOPASCIO	0.2166	0.0118	0.0586	0.0043	0.0240	0.0023	0.0430	0.0038	15583	313
BAGNI DI LUCCA	0.2078	0.0113	0.0554	0.0039	0.0227	0.0020	0.0406	0.0032	15614	291
BARGA	0.1836	0.0099	0.0471	0.0033	0.0187	0.0017	0.0335	0.0026	16408	283
BORGO A MOZZANO	0.1838	0.0094	0.0474	0.0037	0.0190	0.0021	0.0337	0.0030	16032	294
CAMAIORE	0.1919	0.0089	0.0494	0.0033	0.0197	0.0017	0.0355	0.0027	16254	259
CAMPORGIANO	0.1916	0.0140	0.0500	0.0052	0.0205	0.0031	0.0364	0.0047	15778	345
CAPANNORI	0.1634	0.0077	0.0415	0.0026	0.0165	0.0013	0.0289	0.0021	16931	283
CAREGGINE	0.1955	0.0279	0.0489	0.0089	0.0190	0.0047	0.0351	0.0074	15349	584
CASTELNUOVO DI GARFAGNANA	0.1988	0.0115	0.0516	0.0040	0.0205	0.0021	0.0370	0.0033	16049	291
CASTIGLIONE DI GARFAGNANA	0.2071	0.0169	0.0531	0.0056	0.0211	0.0030	0.0388	0.0047	15310	416
COREGLIA ANTELMINELLI	0.1958	0.0124	0.0505	0.0044	0.0202	0.0022	0.0365	0.0036	15843	317
FABBRICHE DI VALLICO	0.2188	0.0314	0.0546	0.0104	0.0216	0.0055	0.0410	0.0090	14609	640
FORTE DEI MARMI	0.1795	0.0096	0.0452	0.0035	0.0179	0.0019	0.0322	0.0029	16975	320
FOSCIANDORA	0.1948	0.0276	0.0486	0.0094	0.0191	0.0050	0.0351	0.0079	15379	588
GALLICANO	0.1917	0.0132	0.0486	0.0044	0.0192	0.0023	0.0350	0.0036	15639	310
GIUNCUGNANO	0.1982	0.0271	0.0518	0.0097	0.0209	0.0055	0.0374	0.0082	15572	672
LUCCA	0.1670	0.0071	0.0436	0.0028	0.0177	0.0015	0.0305	0.0022	17533	256
MASSAROSA	0.1859	0.0101	0.0479	0.0035	0.0193	0.0018	0.0344	0.0029	16217	282
MINUCCIANO	0.2162	0.0160	0.0538	0.0054	0.0209	0.0028	0.0398	0.0045	15047	336
MOLAZZANA	0.1988	0.0196	0.0484	0.0069	0.0186	0.0039	0.0350	0.0058	15171	388
MONTECARLO	0.1922	0.0140	0.0527	0.0055	0.0223	0.0032	0.0383	0.0046	16620	371
PESCAGLIA	0.1973	0.0137	0.0511	0.0053	0.0206	0.0031	0.0371	0.0046	15812	329
PIAZZA AL SERCHIO	0.2140	0.0147	0.0576	0.0051	0.0240	0.0030	0.0427	0.0046	15241	377
PIETRASANTA	0.2061	0.0100	0.0533	0.0038	0.0213	0.0019	0.0388	0.0031	16049	250
PIEVE FOSCIANA	0.2006	0.0158	0.0523	0.0055	0.0212	0.0031	0.0381	0.0047	15873	379
PORCARI	0.1908	0.0109	0.0500	0.0039	0.0202	0.0021	0.0358	0.0034	16112	349
SAN ROMANO IN GARFAGNANA	0.2055	0.0173	0.0521	0.0064	0.0204	0.0037	0.0376	0.0055	15518	425
SERAVEZZA	0.2279	0.0122	0.0618	0.0047	0.0262	0.0025	0.0469	0.0041	15277	274
SILLANO	0.2128	0.0220	0.0535	0.0073	0.0207	0.0041	0.0389	0.0065	15078	510
STAZZEMA	0.2237	0.0165	0.0558	0.0056	0.0217	0.0029	0.0414	0.0051	14661	340
VAGLI SOTTO	0.2151	0.0241	0.0520	0.0073	0.0196	0.0037	0.0380	0.0063	14645	427
VERGEMOLI	0.1930	0.0275	0.0530	0.0092	0.0222	0.0057	0.0383	0.0076	15666	631
VIAREGGIO	0.2145	0.0089	0.0579	0.0039	0.0237	0.0020	0.0424	0.0032	16175	231
VILLA BASILICA	0.2028	0.0164	0.0512	0.0058	0.0200	0.0032	0.0370	0.0049	15310	461
VILLA COLLEMANDINA	0.1891	0.0193	0.0466	0.0065	0.0180	0.0036	0.0333	0.0054	15591	475
Province of Lucca	0.1903	0.0079	0.0497	0.0031	0.0201	0.0015	0.0357	0.0025	16449	232
Tuscany	0.1774	0.0043	0.0457	0.0018	0.0180	0.0010	0.0319	0.0015	16910	154

Table A.8. Poverty measures at Municipality level, Province of Pisa

	HCR		FGT(1)		FGT(2)		SEN		Mean equivalised income	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Point estimate	Standard error	Point estimate	Standard error	Point estimate
BIENTINA	0.1818	0.0100	0.0469	0.0037	0.0187	0.0020	0.0332	0.0030	16512	326
BUTI	0.1793	0.0117	0.0451	0.0038	0.0176	0.0020	0.0317	0.0033	16422	332
CALCI	0.1835	0.0119	0.0492	0.0042	0.0201	0.0023	0.0348	0.0037	17546	348
CALCINAIA	0.1691	0.0085	0.0434	0.0033	0.0173	0.0017	0.0303	0.0026	16705	267
CAPANOLI	0.1727	0.0117	0.0450	0.0038	0.0182	0.0021	0.0318	0.0032	16483	337
CASALE MARITTIMO	0.1876	0.0210	0.0475	0.0070	0.0188	0.0040	0.0341	0.0063	16383	491
CASCIANA TERME	0.1911	0.0135	0.0513	0.0044	0.0212	0.0023	0.0371	0.0037	16469	364
CASCINA	0.1811	0.0078	0.0468	0.0030	0.0188	0.0015	0.0333	0.0024	16549	244
CASTELFRANCO DI SOTTO	0.2006	0.0109	0.0537	0.0043	0.0219	0.0023	0.0388	0.0036	15908	299
CASTELLINA MARITTIMA	0.2186	0.0159	0.0580	0.0061	0.0234	0.0035	0.0425	0.0054	15625	391
CASTELNUOVO DI VAL DI CECINA	0.2821	0.0159	0.0847	0.0068	0.0385	0.0043	0.0682	0.0065	14305	324
CHIANNI	0.1985	0.0179	0.0506	0.0060	0.0201	0.0033	0.0367	0.0053	15811	365
CRESPINA	0.1914	0.0151	0.0508	0.0050	0.0205	0.0026	0.0362	0.0043	16367	346
FAUGLIA	0.1966	0.0141	0.0526	0.0054	0.0216	0.0029	0.0380	0.0043	16304	399
GUARDISTALLO	0.2148	0.0230	0.0558	0.0077	0.0225	0.0042	0.0414	0.0068	15375	482
LAJATICO	0.1886	0.0179	0.0476	0.0061	0.0186	0.0033	0.0338	0.0051	15888	459
LARI	0.1827	0.0103	0.0473	0.0037	0.0190	0.0019	0.0336	0.0030	16332	283
LORENZANA	0.1818	0.0183	0.0469	0.0065	0.0185	0.0036	0.0327	0.0051	16419	564
MONTECATINI VAL DI CECINA	0.2189	0.0157	0.0575	0.0058	0.0231	0.0032	0.0424	0.0050	15435	425
MONTESCUDAIO	0.1762	0.0174	0.0457	0.0051	0.0183	0.0026	0.0321	0.0043	16609	461
MONTEVERDI MARITTIMO	0.2844	0.0237	0.0820	0.0096	0.0354	0.0061	0.0651	0.0092	13987	501
MONTOPOLI IN VAL D'ARNO	0.1813	0.0102	0.0479	0.0038	0.0194	0.0020	0.0339	0.0032	16548	307
ORCIANO PISANO	0.2237	0.0290	0.0597	0.0098	0.0240	0.0054	0.0435	0.0080	14985	622
PALAIA	0.1916	0.0121	0.0504	0.0040	0.0203	0.0020	0.0360	0.0033	16228	319
PECCIOLI	0.1849	0.0114	0.0477	0.0037	0.0191	0.0020	0.0341	0.0031	16035	342
PISA	0.1965	0.0092	0.0526	0.0037	0.0213	0.0019	0.0375	0.0030	17306	308
POMARANACE	0.2236	0.0122	0.0589	0.0046	0.0236	0.0024	0.0435	0.0040	15116	249
PONSACCO	0.1930	0.0095	0.0515	0.0037	0.0210	0.0020	0.0369	0.0031	16257	264
PONTEDERA	0.1906	0.0079	0.0505	0.0032	0.0204	0.0017	0.0360	0.0026	16675	255
RIPARBELLA	0.2486	0.0190	0.0725	0.0076	0.0325	0.0049	0.0565	0.0073	14825	453
SAN GIULIANO TERME	0.1586	0.0073	0.0402	0.0027	0.0159	0.0013	0.0278	0.0021	17762	270
SAN MINIATO	0.1676	0.0083	0.0431	0.0029	0.0173	0.0015	0.0302	0.0023	16880	288
SANTA CROCE SULL'ARNO	0.2220	0.0124	0.0616	0.0050	0.0256	0.0027	0.0454	0.0043	15737	297
SANTA LUCE	0.2269	0.0229	0.0586	0.0078	0.0230	0.0040	0.0432	0.0070	15035	465
SANTA MARIA A MONTE	0.1855	0.0099	0.0479	0.0034	0.0191	0.0018	0.0341	0.0029	16021	300
TERRICCIOLA	0.1738	0.0122	0.0436	0.0040	0.0170	0.0021	0.0304	0.0033	16428	331
VECCHIANO	0.1737	0.0094	0.0447	0.0034	0.0179	0.0018	0.0315	0.0028	16608	287
VICOPIASANO	0.1727	0.0095	0.0436	0.0034	0.0173	0.0018	0.0308	0.0028	16740	297
VOLTERRA	0.1768	0.0097	0.0462	0.0034	0.0190	0.0018	0.0330	0.0028	16780	290
Province of Pisa	0.1871	0.0075	0.0492	0.0030	0.0199	0.0015	0.0351	0.0024	16712	230
Tuscany	0.1774	0.0043	0.0457	0.0018	0.0180	0.0010	0.0319	0.0015	16910	154

Table A.9. Poverty measures at Municipality level, Province of Pistoia

	HCR		FGT(1)		FGT(2)		SEN		Mean equivalised income	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Point estimate	Standard error	Point estimate	Standard error	Point estimate
ABETONE	0.1726	0.0245	0.0386	0.0066	0.0133	0.0031	0.0264	0.0054	15656	587
AGLIANA	0.1985	0.0107	0.0511	0.0038	0.0199	0.0019	0.0364	0.0032	15329	287
BUGGIANO	0.1862	0.0115	0.0461	0.0039	0.0171	0.0019	0.0318	0.0032	16038	300
CUTIGLIANO	0.1599	0.0155	0.0366	0.0042	0.0129	0.0019	0.0247	0.0032	15784	401
LAMPORECCHIO	0.1774	0.0113	0.0446	0.0039	0.0169	0.0020	0.0307	0.0031	15886	374
LARCIANO	0.1845	0.0142	0.0456	0.0043	0.0170	0.0020	0.0317	0.0036	15783	366
MARLIANA	0.1809	0.0131	0.0456	0.0045	0.0174	0.0023	0.0316	0.0036	15918	388
MASSA E COZZILE	0.1869	0.0100	0.0477	0.0036	0.0184	0.0018	0.0334	0.0029	16043	332
MONSUMMANO TERME	0.2172	0.0116	0.0566	0.0041	0.0221	0.0020	0.0409	0.0035	15083	286
MONTALE	0.1736	0.0120	0.0429	0.0039	0.0162	0.0020	0.0297	0.0033	15886	322
MONTECATINI-TERME	0.2051	0.0086	0.0547	0.0035	0.0215	0.0019	0.0387	0.0030	16329	291
PESCIA	0.1907	0.0094	0.0486	0.0033	0.0185	0.0016	0.0338	0.0027	16062	300
PIEVE A NIEVOLE	0.1913	0.0103	0.0492	0.0037	0.0190	0.0019	0.0345	0.0030	15736	322
PISTOIA	0.1895	0.0082	0.0481	0.0030	0.0182	0.0015	0.0334	0.0025	16367	287
PITEGLIO	0.1707	0.0137	0.0410	0.0040	0.0151	0.0020	0.0281	0.0034	15472	402
PONTE BUGGIANESE	0.2021	0.0125	0.0510	0.0042	0.0193	0.0020	0.0361	0.0035	15326	323
QUARRATA	0.2064	0.0106	0.0537	0.0040	0.0210	0.0021	0.0385	0.0035	15356	297
SAMBUCA PISTOIESE	0.2004	0.0168	0.0501	0.0058	0.0188	0.0031	0.0354	0.0049	15088	431
SAN MARCELLO PISTOIESE	0.1618	0.0092	0.0387	0.0029	0.0141	0.0014	0.0261	0.0022	16160	314
SERRAVALLE PISTOIESE	0.1885	0.0111	0.0478	0.0036	0.0185	0.0018	0.0337	0.0031	16046	337
UZZANO	0.1714	0.0114	0.0414	0.0036	0.0151	0.0017	0.0280	0.0028	16484	388
CHIESINA UZZANESE	0.2099	0.0137	0.0560	0.0051	0.0229	0.0028	0.0409	0.0044	15361	355
Province of Pistoia	0.1928	0.0085	0.0492	0.0031	0.0188	0.0015	0.0345	0.0026	15939	275
Tuscany	0.1774	0.0043	0.0457	0.0018	0.0180	0.0010	0.0319	0.0015	16910	154

Table A.10. Poverty measures at Municipality level, Province of Siena

	HCR		FGT(1)		FGT(2)		SEN		Mean equivalised income	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Point estimate	Standard error	Point estimate	Standard error	Point estimate
ABBADIA SAN SALVATORE	0.1344	0.0163	0.0304	0.0043	0.0106	0.0017	0.0199	0.0032	17011	616
ASCIANO	0.1576	0.0151	0.0413	0.0050	0.0168	0.0024	0.0285	0.0040	16982	604
BUONCONVENTO	0.1785	0.0172	0.0482	0.0062	0.0194	0.0033	0.0334	0.0051	16455	616
CASOLE D'ELSA	0.1523	0.0200	0.0378	0.0059	0.0143	0.0029	0.0254	0.0048	17044	681
CASTELLINA IN CHIANTI	0.1571	0.0181	0.0393	0.0052	0.0150	0.0026	0.0265	0.0044	17464	708
CASTELNUOVO BERARDENGA	0.1317	0.0141	0.0321	0.0043	0.0119	0.0020	0.0209	0.0032	18645	682
CASTIGLIONE D'ORCIA	0.1542	0.0162	0.0366	0.0048	0.0131	0.0023	0.0240	0.0039	16586	622
CETONA	0.1478	0.0193	0.0342	0.0055	0.0122	0.0024	0.0227	0.0042	16898	652
CHIANCIANO TERME	0.1289	0.0130	0.0318	0.0040	0.0119	0.0018	0.0206	0.0029	18368	663
CHIUSDINO	0.1745	0.0211	0.0431	0.0059	0.0160	0.0027	0.0295	0.0049	16140	665
CHIUSI	0.1683	0.0164	0.0428	0.0049	0.0163	0.0023	0.0291	0.0042	16867	603
COLLE DI VAL D'ELSA	0.1865	0.0160	0.0499	0.0056	0.0196	0.0027	0.0344	0.0046	16751	582
GAIOLE IN CHIANTI	0.1639	0.0186	0.0462	0.0052	0.0230	0.0024	0.0355	0.0044	16872	632
MONTALCINO	0.1595	0.0163	0.0400	0.0050	0.0152	0.0023	0.0270	0.0040	17001	604
MONTEPULCIANO	0.1389	0.0133	0.0347	0.0039	0.0135	0.0017	0.0233	0.0030	17718	641
MONTERIGGIONI	0.1185	0.0136	0.0286	0.0038	0.0107	0.0017	0.0185	0.0028	18849	690
MONTERONI D'ARBIA	0.1628	0.0160	0.0441	0.0050	0.0182	0.0024	0.0305	0.0041	17208	590
MONTICIANO	0.2033	0.0231	0.0547	0.0069	0.0214	0.0034	0.0383	0.0062	16037	690
MURLO	0.1886	0.0187	0.0516	0.0068	0.0206	0.0036	0.0355	0.0058	16883	636
PIANCASTAGNAIO	0.1322	0.0165	0.0292	0.0045	0.0100	0.0018	0.0189	0.0033	16999	595
PIENZA	0.1381	0.0189	0.0373	0.0060	0.0165	0.0032	0.0264	0.0047	17750	724
POGGIBONSI	0.1690	0.0152	0.0430	0.0049	0.0163	0.0022	0.0291	0.0040	17004	599
RADDA IN CHIANTI	0.1372	0.0180	0.0311	0.0054	0.0108	0.0025	0.0200	0.0041	17723	765
RADICOFANI	0.1955	0.0243	0.0491	0.0083	0.0183	0.0042	0.0340	0.0067	15681	683
RADICONOLI	0.2406	0.0261	0.0668	0.0097	0.0268	0.0051	0.0488	0.0083	15399	692
RAPOLANO TERME	0.1515	0.0163	0.0371	0.0047	0.0137	0.0021	0.0246	0.0038	16915	612
SAN CASCIANO DEI BAGNI	0.1499	0.0180	0.0354	0.0057	0.0133	0.0028	0.0241	0.0046	16531	681
SAN GIMIGNANO	0.1397	0.0147	0.0337	0.0041	0.0125	0.0018	0.0222	0.0033	17510	614
SAN GIOVANNI D'ASSO	0.1713	0.0238	0.0429	0.0077	0.0162	0.0040	0.0292	0.0061	16660	759
SAN QUIRICO D'ORCIA	0.1703	0.0184	0.0430	0.0061	0.0163	0.0030	0.0292	0.0050	16364	572
SARTEANO	0.1447	0.0152	0.0345	0.0042	0.0126	0.0019	0.0228	0.0034	17183	629
SIENA	0.1233	0.0122	0.0288	0.0035	0.0103	0.0014	0.0184	0.0025	19123	661
SINALUNGA	0.1506	0.0137	0.0378	0.0042	0.0144	0.0020	0.0253	0.0033	17004	593
SOVICILLE	0.1553	0.0154	0.0399	0.0049	0.0155	0.0024	0.0270	0.0040	17514	649
TORRITA DI SIENA	0.1557	0.0173	0.0396	0.0053	0.0152	0.0023	0.0267	0.0041	16844	607
TREQUANDA	0.1614	0.0196	0.0407	0.0060	0.0153	0.0028	0.0273	0.0047	16950	639
Province of Siena	0.1495	0.0136	0.0374	0.0041	0.0142	0.0018	0.0250	0.0032	17600	600
Tuscany	0.1774	0.0043	0.0457	0.0018	0.0180	0.0010	0.0319	0.0015	16910	154

Table A.11. Inequality measures at Municipality level, Province of Firenze

	Gini		Gini of the poor		GE(0)		GE(1) = Theil	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error
BAGNO A RIPOLI	0.3037	0.0056	0.1209	0.0051	0.1542	0.0058	0.1617	0.0070
BARBERINO DI MUGELLO	0.2956	0.0053	0.1318	0.0061	0.1479	0.0056	0.1532	0.0069
BARBERINO VAL D'ELSA	0.3022	0.0085	0.1329	0.0099	0.1545	0.0090	0.1593	0.0118
BORGO SAN LORENZO	0.2983	0.0049	0.1358	0.0071	0.1513	0.0053	0.1551	0.0060
CALENZANO	0.2913	0.0057	0.1347	0.0077	0.1447	0.0063	0.1489	0.0069
CAMPI BISENZIO	0.2970	0.0044	0.1481	0.0080	0.1534	0.0058	0.1541	0.0049
CAPRAIA E LIMITE	0.2870	0.0067	0.1356	0.0113	0.1404	0.0073	0.1438	0.0086
CASTELFIORENTINO	0.2969	0.0052	0.1463	0.0069	0.1529	0.0059	0.1543	0.0062
CERRETO GUIDI	0.2832	0.0064	0.1347	0.0086	0.1370	0.0066	0.1406	0.0076
CERTALDO	0.2896	0.0052	0.1406	0.0066	0.1452	0.0059	0.1473	0.0063
DICOMANO	0.2959	0.0074	0.1326	0.0098	0.1486	0.0080	0.1530	0.0099
EMPOLI	0.2981	0.0045	0.1314	0.0055	0.1506	0.0048	0.1557	0.0052
FIESOLE	0.3045	0.0062	0.1173	0.0058	0.1543	0.0064	0.1634	0.0082
FIGLINE VALDARNO	0.2934	0.0053	0.1271	0.0057	0.1450	0.0054	0.1508	0.0068
FIRENZE	0.3177	0.0048	0.1299	0.0038	0.1700	0.0053	0.1755	0.0053
FIRENZUOLA	0.2942	0.0080	0.1400	0.0092	0.1485	0.0086	0.1508	0.0106
FUCECCHIO	0.3012	0.0055	0.1417	0.0066	0.1561	0.0065	0.1581	0.0069
GAMBASSI TERME	0.2886	0.0073	0.1250	0.0088	0.1405	0.0073	0.1457	0.0101
GREVE IN CHIANTI	0.3044	0.0056	0.1368	0.0082	0.1577	0.0063	0.1629	0.0074
IMPRUNETA	0.3006	0.0049	0.1199	0.0055	0.1508	0.0050	0.1584	0.0065
INCISA IN VAL D'ARNO	0.2936	0.0068	0.1404	0.0090	0.1474	0.0071	0.1514	0.0095
LAISTRA A SIGNA	0.2942	0.0052	0.1287	0.0054	0.1461	0.0055	0.1513	0.0065
LONDA	0.2971	0.0116	0.1197	0.0134	0.1476	0.0119	0.1551	0.0173
MARRADI	0.2995	0.0087	0.1312	0.0089	0.1514	0.0090	0.1561	0.0122
MONTAIONE	0.2954	0.0090	0.1349	0.0118	0.1487	0.0092	0.1537	0.0129
MONTELUPO FIORENTINO	0.2845	0.0049	0.1259	0.0077	0.1367	0.0054	0.1424	0.0067
MONTESPERTOLI	0.3020	0.0056	0.1340	0.0076	0.1544	0.0060	0.1587	0.0071
PALAZZUOLO SUL SENIO	0.2923	0.0119	0.1230	0.0157	0.1431	0.0120	0.1480	0.0160
PELAGO	0.2891	0.0063	0.1264	0.0073	0.1411	0.0063	0.1463	0.0077
PONTASSIEVE	0.2954	0.0046	0.1311	0.0057	0.1481	0.0051	0.1533	0.0056
REGGELLO	0.2923	0.0054	0.1307	0.0066	0.1446	0.0058	0.1500	0.0070
RIGNANO SULL'ARNO	0.3021	0.0068	0.1327	0.0091	0.1546	0.0072	0.1602	0.0091
RUFINA	0.2880	0.0066	0.1269	0.0071	0.1401	0.0064	0.1447	0.0080
SAN CASCIANO IN VAL DI PESA	0.2960	0.0055	0.1219	0.0051	0.1466	0.0056	0.1536	0.0071
SAN GODENZO	0.2983	0.0126	0.1271	0.0142	0.1497	0.0128	0.1555	0.0178
SAN PIERO A SIEVE	0.3025	0.0089	0.1345	0.0088	0.1552	0.0094	0.1584	0.0118
SCANDICCI	0.2932	0.0038	0.1301	0.0049	0.1473	0.0043	0.1507	0.0041
SCARPERIA	0.2997	0.0058	0.1373	0.0090	0.1531	0.0062	0.1566	0.0077
SESTO FIORENTINO	0.2959	0.0043	0.1324	0.0052	0.1490	0.0046	0.1531	0.0052
SIGNA	0.2994	0.0051	0.1348	0.0068	0.1522	0.0056	0.1561	0.0065
TAVARNELLE VAL DI PESA	0.2948	0.0067	0.1268	0.0080	0.1465	0.0070	0.1519	0.0088
VAGLIA	0.3014	0.0073	0.1238	0.0095	0.1527	0.0078	0.1594	0.0107
VICCHIO	0.3039	0.0074	0.1519	0.0068	0.2352	0.0242	0.1630	0.0102
VINCI	0.2886	0.0057	0.1337	0.0076	0.1422	0.0061	0.1468	0.0072
Province of Firenze	0.3056	0.0041	0.1321	0.0044	0.1586	0.0046	0.1633	0.0044
Tuscany	0.3069	0.0034	0.1406	0.0028	0.1601	0.0038	0.1624	0.0037

Table A.12. Inequality measures at Municipality level, Province of Arezzo

	Gini		Gini of the poor		GE(0)		GE(1) = Theil	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error
ANGHIARI	0.2909	0.0073	0.1434	0.0100	0.1452	0.0078	0.1489	0.0099
AREZZO	0.3022	0.0041	0.1353	0.0040	0.1540	0.0044	0.1597	0.0046
BADIA TEDALDA	0.2705	0.0139	0.1176	0.0150	0.1228	0.0131	0.1287	0.0179
BIBBIENA	0.3026	0.0059	0.1409	0.0059	0.1550	0.0063	0.1602	0.0084
BUCINE	0.2848	0.0054	0.1340	0.0058	0.1374	0.0054	0.1423	0.0066
CAPOLONA	0.2827	0.0083	0.1275	0.0081	0.1344	0.0080	0.1400	0.0108
CAPRESE								
MICHELANGELO	0.2846	0.0120	0.1349	0.0126	0.1371	0.0122	0.1418	0.0152
CASTEL FOCOGNANO	0.2927	0.0085	0.1437	0.0087	0.1462	0.0087	0.1504	0.0120
CASTELFRANCO DI SOPRA	0.2934	0.0107	0.1306	0.0118	0.1449	0.0112	0.1521	0.0152
CASTEL SAN NICCOLO'	0.2833	0.0092	0.1503	0.0115	0.1388	0.0093	0.1405	0.0119
CASTIGLION FIBOCCHI	0.2957	0.0119	0.1578	0.0150	0.1519	0.0132	0.1530	0.0165
CASTIGLION FIORENTINO	0.2955	0.0058	0.1419	0.0067	0.1517	0.0074	0.1527	0.0069
CAVRIGLIA	0.2939	0.0072	0.1449	0.0073	0.1480	0.0077	0.1509	0.0095
CHITIGNANO	0.2888	0.0147	0.1349	0.0157	0.1407	0.0152	0.1469	0.0207
CHIUSI DELLA VERNA	0.2831	0.0101	0.1335	0.0114	0.1357	0.0101	0.1412	0.0146
CIVITELLA IN VAL DI CHIANA	0.2861	0.0065	0.1374	0.0079	0.1389	0.0067	0.1443	0.0081
CORTONA	0.2922	0.0048	0.1379	0.0065	0.1449	0.0053	0.1503	0.0059
FOIANO DELLA CHIANA	0.2986	0.0070	0.1471	0.0070	0.1525	0.0075	0.1559	0.0091
LATERINA	0.2928	0.0091	0.1481	0.0102	0.1501	0.0106	0.1506	0.0128
LORO CIUFFENNA	0.2899	0.0061	0.1331	0.0079	0.1417	0.0062	0.1480	0.0084
LUCIGNANO	0.2985	0.0088	0.1501	0.0113	0.1525	0.0095	0.1559	0.0123
MARCIANO DELLA CHIANA	0.2921	0.0098	0.1403	0.0105	0.1453	0.0099	0.1497	0.0133
MONTEMIGNAIO	0.2714	0.0170	0.1230	0.0200	0.1240	0.0161	0.1301	0.0218
MONTERCHI	0.2840	0.0119	0.1251	0.0122	0.1355	0.0113	0.1418	0.0157
MONTE SAN SAVINO	0.2868	0.0062	0.1390	0.0095	0.1400	0.0067	0.1444	0.0076
MONTEVARCHI	0.2970	0.0049	0.1428	0.0053	0.1548	0.0061	0.1549	0.0061
ORTIGNANO RAGGIOLO	0.2821	0.0160	0.1293	0.0178	0.1339	0.0163	0.1402	0.0226
PERGINE VALDARNO	0.2784	0.0100	0.1597	0.0085	0.1766	0.0168	0.1391	0.0125
PIAN DI SCO	0.2915	0.0074	0.1480	0.0098	0.1512	0.0096	0.1486	0.0094
PIEVE SANTO STEFANO	0.2942	0.0095	0.1336	0.0072	0.1458	0.0096	0.1511	0.0125
POPPI	0.3014	0.0068	0.1428	0.0083	0.1545	0.0074	0.1589	0.0093
PRATOVECCHIO	0.2995	0.0087	0.1327	0.0074	0.1508	0.0089	0.1572	0.0129
SAN GIOVANNI VALDARNO	0.2991	0.0050	0.1375	0.0053	0.1509	0.0053	0.1563	0.0064
SANSEPOLCRO	0.2952	0.0052	0.1443	0.0058	0.1500	0.0058	0.1523	0.0065
SESTINO	0.2859	0.0120	0.1359	0.0141	0.1383	0.0122	0.1429	0.0152
STIA	0.2988	0.0096	0.1397	0.0099	0.1517	0.0102	0.1564	0.0127
SUBBIANO	0.2948	0.0068	0.1365	0.0078	0.1469	0.0070	0.1519	0.0087
TALLA	0.2831	0.0124	0.1287	0.0175	0.1350	0.0122	0.1420	0.0166
TERRANUOVA BRACCIOLINI	0.2904	0.0061	0.1464	0.0063	0.1464	0.0067	0.1486	0.0076
Province of Arezzo	0.2964	0.0037	0.1395	0.0043	0.1500	0.0044	0.1541	0.0039
Tuscany	0.3069	0.0034	0.1406	0.0028	0.1601	0.0038	0.1624	0.0037

Table A.13. Inequality measures at Municipality level, Province of Grosseto

	Gini		Gini of the poor		GE(0)		GE(1) = Theil	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error
ARCIDOSO	0.2997	0.0076	0.1466	0.0082	0.1529	0.0081	0.1506	0.0088
CAMPAGNATICO	0.2956	0.0100	0.1473	0.0106	0.1491	0.0104	0.1481	0.0112
CAPALBIO	0.2907	0.0084	0.1391	0.0100	0.1430	0.0084	0.1427	0.0092
CASTEL DEL PIANO	0.2999	0.0076	0.1389	0.0082	0.1519	0.0079	0.1525	0.0093
CASTELL'AZZARA	0.2885	0.0091	0.1322	0.0106	0.1397	0.0094	0.1407	0.0112
CASTIGLIONE DELLA PESCAIA	0.3012	0.0063	0.1449	0.0073	0.1542	0.0069	0.1530	0.0068
CINIGIANO	0.2881	0.0101	0.1429	0.0111	0.1412	0.0102	0.1398	0.0110
CIVITELLA PAGANICO	0.2965	0.0090	0.1508	0.0118	0.1507	0.0099	0.1486	0.0105
FOLLONICA	0.3090	0.0063	0.1450	0.0051	0.1616	0.0069	0.1611	0.0070
GAVORRANO	0.2986	0.0067	0.1492	0.0074	0.1520	0.0074	0.1498	0.0072
GROSSETO	0.3082	0.0055	0.1457	0.0040	0.1615	0.0060	0.1601	0.0059
ISOLA DEL GIGLIO	0.2916	0.0139	0.1354	0.0140	0.1432	0.0144	0.1433	0.0151
MAGLIANO IN TOSCANA	0.2915	0.0095	0.1427	0.0105	0.1445	0.0100	0.1433	0.0106
MANCIANO	0.2950	0.0071	0.1401	0.0069	0.1472	0.0073	0.1474	0.0080
MASSA MARITTIMA	0.3050	0.0072	0.1441	0.0062	0.1574	0.0078	0.1571	0.0082
MONTE ARGENTARIO	0.3075	0.0065	0.1491	0.0057	0.1599	0.0070	0.1596	0.0073
MONTIERI	0.2975	0.0122	0.1516	0.0131	0.1513	0.0128	0.1493	0.0143
ORBETELLO	0.3101	0.0061	0.1506	0.0058	0.1644	0.0070	0.1623	0.0069
PITIGLIANO	0.2987	0.0087	0.1409	0.0085	0.1510	0.0089	0.1514	0.0100
ROCCALBEGNA	0.2874	0.0120	0.1364	0.0170	0.1397	0.0121	0.1395	0.0128
ROCCASTRADA	0.3002	0.0068	0.1496	0.0073	0.1537	0.0073	0.1523	0.0072
SANTA FIORA	0.2929	0.0074	0.1357	0.0086	0.1446	0.0076	0.1449	0.0086
SCANSANO	0.2953	0.0080	0.1500	0.0089	0.1505	0.0090	0.1476	0.0094
SCARLINO	0.3045	0.0083	0.1456	0.0098	0.1574	0.0087	0.1561	0.0092
SEGGIANO	0.2883	0.0123	0.1354	0.0163	0.1405	0.0124	0.1405	0.0145
SORANO	0.2935	0.0092	0.1437	0.0093	0.1464	0.0094	0.1459	0.0099
MONTEROTONDO MARITTIMO	0.3111	0.0125	0.1923	0.0175	0.1833	0.0181	0.1645	0.0146
SEMPRONIANO	0.2884	0.0120	0.1313	0.0130	0.1397	0.0118	0.1412	0.0141
Province of Grosseto	0.3051	0.0053	0.1462	0.0040	0.1582	0.0058	0.1571	0.0056
Tuscany	0.3069	0.0034	0.1406	0.0028	0.1601	0.0038	0.1624	0.0037

Table A.14. Inequality measures at Municipality level, Province of Prato

	Gini		Gini of the poor		GE(0)		GE(1) = Theil	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error
CANTAGALLO	0.2855	0.0090	0.1340	0.0095	0.1378	0.0091	0.1425	0.0118
CARMIGNANO	0.2973	0.0059	0.1455	0.0064	0.1531	0.0070	0.1545	0.0073
MONTEMURLO	0.2935	0.0053	0.1440	0.0065	0.1468	0.0059	0.1504	0.0065
POGGIO A CAIANO	0.2972	0.0068	0.1377	0.0077	0.1497	0.0071	0.1546	0.0089
PRATO	0.3009	0.0039	0.1418	0.0045	0.1540	0.0044	0.1581	0.0041
VAIANO	0.2833	0.0065	0.1284	0.0060	0.1352	0.0063	0.1408	0.0076
VERNIO	0.2834	0.0071	0.1363	0.0078	0.1362	0.0072	0.1406	0.0092
Province of Prato	0.2989	0.0038	0.1415	0.0046	0.1520	0.0044	0.1560	0.0039
Tuscany	0.3069	0.0034	0.1406	0.0028	0.1601	0.0038	0.1624	0.0037

Table A.15. Inequality measures at Municipality level, Province of Livorno

	Gini		Gini of the poor		GE(0)		GE(1) = Theil	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error
BIBBONA	0.2999	0.0088	0.1421	0.0100	0.1524	0.0090	0.1513	0.0098
CAMPIGLIA MARITTIMA	0.2993	0.0063	0.1437	0.0052	0.1520	0.0066	0.1512	0.0069
CAMPO NELL'ELBA	0.3016	0.0073	0.1436	0.0081	0.1536	0.0080	0.1530	0.0083
CAPOLIVERI	0.3068	0.0086	0.1437	0.0098	0.1595	0.0094	0.1588	0.0101
CAPRAIA ISOLA	0.3204	0.0207	0.1474	0.0229	0.1734	0.0231	0.1725	0.0244
CASTAGNETO								
CARDUCCI	0.3007	0.0071	0.1500	0.0073	0.1551	0.0080	0.1528	0.0078
CECINA	0.3075	0.0056	0.1437	0.0044	0.1601	0.0062	0.1592	0.0061
COLLESALVETTI	0.2974	0.0058	0.1441	0.0060	0.1503	0.0062	0.1493	0.0063
LIVORNO	0.3200	0.0062	0.1477	0.0040	0.1737	0.0070	0.1726	0.0070
MARCIANA	0.2889	0.0104	0.1331	0.0096	0.1402	0.0099	0.1404	0.0113
MARCIANA MARINA	0.3001	0.0118	0.1431	0.0117	0.1526	0.0119	0.1524	0.0129
PIOMBINO	0.3098	0.0060	0.1461	0.0046	0.1626	0.0065	0.1618	0.0064
PORTO AZZURRO	0.3176	0.0086	0.1533	0.0084	0.1710	0.0093	0.1692	0.0103
PORTOFERRAIO	0.3172	0.0071	0.1498	0.0059	0.1704	0.0080	0.1695	0.0082
RIO MARINA	0.2983	0.0105	0.1399	0.0098	0.1497	0.0107	0.1502	0.0118
RIO NELL'ELBA	0.3146	0.0152	0.1547	0.0128	0.1681	0.0165	0.1674	0.0194
ROSIGNANO								
MARITTIMO	0.3019	0.0052	0.1421	0.0041	0.1541	0.0055	0.1540	0.0056
SAN VINCENZO	0.2991	0.0068	0.1411	0.0076	0.1514	0.0070	0.1514	0.0077
SASSETTA	0.3174	0.0178	0.1610	0.0174	0.1731	0.0195	0.1683	0.0203
SUVERETO	0.2942	0.0084	0.1389	0.0112	0.1462	0.0088	0.1464	0.0097
Province of Livorno	0.3124	0.0056	0.1463	0.0038	0.1654	0.0062	0.1645	0.0061
Tuscany	0.3069	0.0034	0.1406	0.0028	0.1601	0.0038	0.1624	0.0037

Table A.16. Inequality measures at Municipality level, Province of Massa

	Gini		Gini of the poor		GE(0)		GE(1) = Theil	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error
AULLA	0.3063	0.0066	0.1468	0.0068	0.1594	0.0072	0.1581	0.0076
BAGNONE	0.2953	0.0115	0.1379	0.0123	0.1472	0.0120	0.1484	0.0136
CARRARA	0.3187	0.0066	0.1457	0.0039	0.1714	0.0072	0.1715	0.0073
CASOLA IN LUNIGIANA	0.2897	0.0110	0.1399	0.0125	0.1424	0.0105	0.1411	0.0121
COMANO	0.2961	0.0145	0.1460	0.0241	0.1495	0.0158	0.1482	0.0177
FILATTIERA	0.3001	0.0096	0.1456	0.0117	0.1533	0.0102	0.1525	0.0116
FIVIZZANO	0.2959	0.0058	0.1402	0.0065	0.1482	0.0061	0.1481	0.0063
FOSDINOVO	0.3080	0.0092	0.1433	0.0077	0.1606	0.0100	0.1602	0.0108
LICCIANA NARDI	0.3030	0.0078	0.1438	0.0085	0.1556	0.0083	0.1546	0.0085
MASSA	0.3103	0.0060	0.1439	0.0044	0.1627	0.0066	0.1626	0.0067
MONTIGNOSO	0.3099	0.0072	0.1433	0.0059	0.1620	0.0077	0.1621	0.0084
MULAZZO	0.2864	0.0083	0.1350	0.0111	0.1385	0.0081	0.1382	0.0094
PODENZANA	0.3010	0.0112	0.1408	0.0132	0.1536	0.0122	0.1527	0.0128
PONTREMOLI	0.3088	0.0065	0.1434	0.0067	0.1614	0.0071	0.1605	0.0071
TRESANA	0.2951	0.0089	0.1436	0.0119	0.1483	0.0095	0.1463	0.0101
VILLAFRANCA IN LUNIGIANA	0.3067	0.0085	0.1470	0.0076	0.1598	0.0091	0.1582	0.0097
ZERI	0.2806	0.0103	0.1406	0.0153	0.1345	0.0102	0.1329	0.0114
Province of Massa	0.3107	0.0059	0.1445	0.0039	0.1632	0.0064	0.1630	0.0064
Tuscany	0.3069	0.0034	0.1406	0.0028	0.1601	0.0038	0.1624	0.0037

Table A.17. Inequality measures at Municipality level, Province of Lucca

	Gini		Gini of the poor		GE(0)		GE(1) = Theil	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error
ALTOPASCIO	0.3044	0.0064	0.1486	0.0064	0.1580	0.0069	0.1562	0.0069
BAGNI DI LUCCA	0.2997	0.0075	0.1480	0.0070	0.1535	0.0077	0.1515	0.0083
BARGA	0.3001	0.0062	0.1418	0.0063	0.1526	0.0064	0.1519	0.0069
BORGO A MOZZANO	0.2916	0.0067	0.1426	0.0080	0.1448	0.0072	0.1432	0.0073
CAMAIORE	0.3031	0.0055	0.1425	0.0045	0.1555	0.0058	0.1552	0.0059
CAMPORGIANO	0.2931	0.0095	0.1473	0.0134	0.1468	0.0097	0.1452	0.0105
CAPANORI	0.2960	0.0054	0.1412	0.0043	0.1487	0.0056	0.1479	0.0057
CAREGGINE	0.2857	0.0139	0.1365	0.0185	0.1379	0.0144	0.1379	0.0165
CASTELNUOVO DI GARFAGNANA	0.3033	0.0064	0.1416	0.0071	0.1558	0.0070	0.1557	0.0075
CASTIGLIONE DI GARFAGNANA	0.2915	0.0096	0.1412	0.0111	0.1442	0.0095	0.1433	0.0114
COREGLIA								
ANTELMINELLI	0.2961	0.0074	0.1426	0.0072	0.1488	0.0077	0.1480	0.0086
FABBRICHE DI VALLICO	0.2821	0.0191	0.1395	0.0206	0.1355	0.0188	0.1347	0.0214
FORTE DEI MARMI	0.3108	0.0077	0.1405	0.0077	0.1627	0.0082	0.1634	0.0087
FOSCIANDORA	0.2878	0.0168	0.1372	0.0202	0.1404	0.0168	0.1409	0.0188
GALLICANO	0.2883	0.0076	0.1408	0.0091	0.1410	0.0076	0.1400	0.0084
GIUNCUGNANO	0.2886	0.0179	0.1433	0.0224	0.1425	0.0181	0.1394	0.0195
LUCCA	0.3098	0.0059	0.1453	0.0047	0.1634	0.0065	0.1620	0.0065
MASSAROSA	0.2980	0.0059	0.1438	0.0054	0.1516	0.0063	0.1502	0.0064
MINUCCIANO	0.2915	0.0091	0.1373	0.0098	0.1431	0.0093	0.1435	0.0108
MOLAZZANA	0.2820	0.0127	0.1337	0.0169	0.1346	0.0129	0.1340	0.0145
MONTECARLO	0.3095	0.0091	0.1543	0.0121	0.1647	0.0106	0.1614	0.0107
PESCAGLIA	0.2971	0.0078	0.1442	0.0115	0.1500	0.0086	0.1493	0.0087
PIAZZA AL SERCHIO	0.2962	0.0092	0.1505	0.0113	0.1508	0.0100	0.1482	0.0109
PIETRASANTA	0.3084	0.0068	0.1423	0.0050	0.1606	0.0073	0.1607	0.0077
PIEVE FOSCIANA	0.3008	0.0091	0.1449	0.0122	0.1536	0.0099	0.1525	0.0109
PORCARI	0.2979	0.0064	0.1445	0.0078	0.1510	0.0067	0.1493	0.0069
SAN ROMANO IN GARFAGNANA	0.2948	0.0124	0.1378	0.0151	0.1467	0.0126	0.1465	0.0140
SERAVEZZA	0.3068	0.0068	0.1534	0.0062	0.1793	0.0099	0.1599	0.0078
SILLANO	0.2878	0.0136	0.1360	0.0169	0.1398	0.0136	0.1394	0.0156
STAZZEMA	0.2860	0.0084	0.1365	0.0088	0.1381	0.0085	0.1380	0.0090
VAGLI SOTTO	0.2789	0.0131	0.1309	0.0143	0.1309	0.0123	0.1315	0.0147
VERGEMOLI	0.2885	0.0159	0.1537	0.0246	0.1435	0.0160	0.1391	0.0178
VIAREGGIO	0.3163	0.0062	0.1479	0.0049	0.1698	0.0070	0.1686	0.0069
VILLA BASILICA	0.2866	0.0111	0.1379	0.0128	0.1390	0.0109	0.1375	0.0120
VILLA COLLEMANDINA	0.2863	0.0128	0.1357	0.0152	0.1386	0.0131	0.1393	0.0155
Province of Lucca	0.3059	0.0054	0.1448	0.0040	0.1595	0.0060	0.1580	0.0058
Tuscany	0.3069	0.0034	0.1406	0.0028	0.1601	0.0038	0.1624	0.0037

Table A.18. Inequality measures at Municipality level, Province of Pisa

	Gini		Gini of the poor		GE(0)		GE(1) = Theil	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error
BIENTINA	0.3001	0.0073	0.1424	0.0087	0.1530	0.0074	0.1518	0.0085
BUTI	0.2971	0.0061	0.1379	0.0081	0.1491	0.0065	0.1488	0.0069
CALCI	0.3219	0.0086	0.1474	0.0092	0.1760	0.0099	0.1749	0.0104
CALCINAIA	0.2943	0.0060	0.1417	0.0071	0.1474	0.0063	0.1457	0.0066
CAPANNOLI	0.2932	0.0078	0.1453	0.0093	0.1469	0.0081	0.1449	0.0084
CASALE MARITTIMO	0.3010	0.0132	0.1404	0.0169	0.1534	0.0140	0.1527	0.0160
CASCIANA TERME	0.3063	0.0091	0.1502	0.0093	0.1604	0.0096	0.1585	0.0107
CASCINA	0.3008	0.0050	0.1434	0.0046	0.1539	0.0055	0.1526	0.0054
CASTELFRANCO DI SOTTO	0.3008	0.0067	0.1473	0.0068	0.1542	0.0072	0.1521	0.0073
CASTELLINA MARITTIMA	0.3066	0.0107	0.1446	0.0132	0.1594	0.0112	0.1589	0.0125
CASTELNUOVO DI VAL DI CECINA	0.3197	0.0096	0.1715	0.0121	0.1808	0.0117	0.1732	0.0123
CHIANNI	0.2967	0.0115	0.1408	0.0128	0.1493	0.0116	0.1487	0.0136
CRESPINA	0.3059	0.0092	0.1451	0.0092	0.1590	0.0099	0.1586	0.0111
FAUGLIA	0.3071	0.0098	0.1484	0.0113	0.1610	0.0106	0.1587	0.0111
GUARDISTALLO	0.3010	0.0136	0.1444	0.0159	0.1538	0.0147	0.1551	0.0169
LAJATICO	0.2924	0.0116	0.1376	0.0133	0.1449	0.0116	0.1448	0.0136
LARI	0.2971	0.0064	0.1433	0.0069	0.1501	0.0069	0.1488	0.0071
LORENZANA	0.2959	0.0136	0.1392	0.0163	0.1491	0.0139	0.1478	0.0160
MONTECATINI VAL DI CECINA	0.3012	0.0101	0.1440	0.0107	0.1541	0.0105	0.1534	0.0114
MONTESCUDAIO	0.3008	0.0129	0.1428	0.0122	0.1535	0.0129	0.1530	0.0151
MONTEVERDI MARITTIMO	0.3074	0.0154	0.1597	0.0177	0.1628	0.0170	0.1581	0.0179
MONTOPOLI IN VAL D'ARNO	0.3002	0.0063	0.1457	0.0070	0.1536	0.0069	0.1518	0.0069
ORCIANO PISANO	0.2923	0.0151	0.1433	0.0202	0.1457	0.0153	0.1432	0.0179
PALAIA	0.3017	0.0076	0.1446	0.0078	0.1549	0.0080	0.1538	0.0086
PECCIOLI	0.2935	0.0072	0.1434	0.0085	0.1465	0.0072	0.1459	0.0084
PISA	0.3256	0.0067	0.1457	0.0040	0.1795	0.0076	0.1781	0.0076
POMARANCE	0.2971	0.0070	0.1437	0.0066	0.1497	0.0075	0.1480	0.0075
PONSACCO	0.3025	0.0062	0.1473	0.0062	0.1561	0.0068	0.1540	0.0067
PONTEDERA	0.3097	0.0062	0.1457	0.0047	0.1629	0.0068	0.1617	0.0070
RIPARBELLA	0.3104	0.0120	0.1666	0.0154	0.1692	0.0145	0.1626	0.0144
SAN GIULIANO TERME	0.3082	0.0061	0.1407	0.0047	0.1607	0.0066	0.1603	0.0069
SAN MINIATO	0.2988	0.0054	0.1434	0.0048	0.1519	0.0058	0.1511	0.0057
SANTA CROCE SULL'ARNO	0.3115	0.0082	0.1519	0.0066	0.1657	0.0091	0.1635	0.0091
SANTA LUCE	0.2961	0.0119	0.1394	0.0115	0.1479	0.0122	0.1475	0.0135
SANTA MARIA A MONTE	0.2924	0.0058	0.1424	0.0060	0.1454	0.0061	0.1439	0.0063
TERRICCIOLA	0.2936	0.0087	0.1373	0.0095	0.1458	0.0086	0.1458	0.0098
VECCHIANO	0.2972	0.0059	0.1430	0.0072	0.1502	0.0064	0.1494	0.0064
VICOPIANO	0.2992	0.0069	0.1409	0.0069	0.1516	0.0070	0.1511	0.0080
VOLTERRA	0.3018	0.0065	0.1468	0.0062	0.1573	0.0069	0.1536	0.0072
Province of Pisa	0.3086	0.0054	0.1452	0.0037	0.1618	0.0060	0.1607	0.0059
Tuscany	0.3069	0.0034	0.1406	0.0028	0.1601	0.0038	0.1624	0.0037

Table A.19. Inequality measures at Municipality level, Province of Pistoia

	Gini		Gini of the poor		GE(0)		GE(1) = Theil	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error
ABETONE	0.2756	0.0183	0.1184	0.0167	0.1274	0.0179	0.1346	0.0258
AGLIANA	0.2874	0.0053	0.1390	0.0052	0.1408	0.0056	0.1444	0.0064
BUGGIANO	0.2967	0.0066	0.1304	0.0062	0.1475	0.0068	0.1540	0.0088
CUTIGLIANO	0.2731	0.0101	0.1220	0.0105	0.1251	0.0094	0.1316	0.0137
LAMPORECCHIO	0.2869	0.0071	0.1344	0.0068	0.1393	0.0071	0.1446	0.0093
LARCIANO	0.2894	0.0077	0.1318	0.0063	0.1409	0.0076	0.1467	0.0097
MARLIANA	0.2917	0.0094	0.1349	0.0094	0.1437	0.0093	0.1497	0.0128
MASSA E COZZILE	0.2964	0.0073	0.1371	0.0065	0.1486	0.0076	0.1534	0.0099
MONSUMMANO TERME	0.2942	0.0053	0.1396	0.0052	0.1465	0.0056	0.1511	0.0065
MONTALE	0.2848	0.0067	0.1336	0.0075	0.1375	0.0068	0.1429	0.0077
MONTECATINI-TERME	0.3151	0.0056	0.1417	0.0052	0.1676	0.0063	0.1735	0.0074
PESCIA	0.2991	0.0048	0.1350	0.0046	0.1507	0.0050	0.1562	0.0059
PIEVE A NIEVOLE	0.2930	0.0062	0.1378	0.0064	0.1454	0.0066	0.1501	0.0081
PISTOIA	0.3057	0.0045	0.1344	0.0037	0.1568	0.0047	0.1630	0.0050
PITEGLIO	0.2736	0.0105	0.1287	0.0098	0.1264	0.0101	0.1317	0.0138
PONTE BUGGIANESE	0.2913	0.0067	0.1342	0.0057	0.1430	0.0067	0.1491	0.0095
QUARRATA	0.2944	0.0048	0.1400	0.0058	0.1470	0.0052	0.1513	0.0060
SAMBUCA PISTOIESE	0.2825	0.0113	0.1326	0.0120	0.1349	0.0110	0.1397	0.0144
SAN MARCELLO PISTOIESE	0.2811	0.0054	0.1275	0.0058	0.1331	0.0053	0.1390	0.0069
SERRAVALLE PISTOIESE	0.2989	0.0055	0.1372	0.0063	0.1515	0.0058	0.1573	0.0079
UZZANO	0.2960	0.0078	0.1272	0.0081	0.1466	0.0078	0.1537	0.0108
CHIESINA UZZANESE	0.2972	0.0079	0.1466	0.0089	0.1526	0.0087	0.1545	0.0103
Province of Pistoia	0.2988	0.0040	0.1362	0.0037	0.1505	0.0042	0.1562	0.0042
Tuscany	0.3069	0.0034	0.1406	0.0028	0.1601	0.0038	0.1624	0.0037

Table A.20. Inequality measures at Municipality level, Province of Siena

	Gini		Gini of the poor		GE(0)		GE(1) = Theil	
	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error	Point estimate	Standard error
ABBADIA SAN SALVATORE	0.2832	0.0059	0.1204	0.0062	0.1337	0.0056	0.1418	0.0076
ASCIANO	0.2952	0.0062	0.1449	0.0069	0.1514	0.0068	0.1534	0.0085
BUONCONVENTO	0.2962	0.0091	0.1452	0.0123	0.1509	0.0097	0.1538	0.0125
CASOLE D'ELSA	0.2909	0.0102	0.1335	0.0128	0.1434	0.0101	0.1486	0.0128
CASTELLINA IN CHIANTI	0.3030	0.0101	0.1343	0.0121	0.1555	0.0108	0.1621	0.0154
CASTELNUOVO BERARDENGA	0.3042	0.0074	0.1303	0.0079	0.1557	0.0076	0.1614	0.0097
CASTIGLIONE D'ORCIA	0.2858	0.0096	0.1234	0.0113	0.1367	0.0095	0.1429	0.0126
CETONA	0.2878	0.0090	0.1232	0.0096	0.1387	0.0090	0.1469	0.0129
CHIANCIANO TERME	0.2963	0.0064	0.1313	0.0071	0.1484	0.0066	0.1538	0.0083
CHIUSDINO	0.2889	0.0089	0.1311	0.0107	0.1404	0.0089	0.1451	0.0117
CHIUSI	0.3001	0.0063	0.1352	0.0073	0.1520	0.0067	0.1575	0.0084
COLLE DI VAL D'ELSA	0.3067	0.0049	0.1410	0.0064	0.1600	0.0056	0.1632	0.0059
GAIOLE IN CHIANTI	0.3036	0.0093	0.1789	0.0100	0.2587	0.0335	0.1654	0.0135
MONTALCINO	0.2952	0.0068	0.1341	0.0080	0.1474	0.0070	0.1523	0.0094
MONTEPULCIANO	0.2954	0.0047	0.1373	0.0062	0.1492	0.0053	0.1540	0.0061
MONTERIGGIONI	0.2974	0.0067	0.1311	0.0081	0.1494	0.0071	0.1550	0.0087
MONTERONI D'ARBIA	0.3007	0.0074	0.1495	0.0070	0.1571	0.0081	0.1582	0.0096
MONTICIANO	0.3056	0.0123	0.1405	0.0117	0.1587	0.0130	0.1641	0.0178
MURLO	0.3128	0.0097	0.1434	0.0126	0.1664	0.0107	0.1693	0.0140
PIANCASTAGNAIO	0.2789	0.0071	0.1165	0.0078	0.1295	0.0067	0.1369	0.0090
PIENZA	0.2956	0.0113	0.1594	0.0153	0.1554	0.0138	0.1554	0.0150
POGGIBONSI	0.3006	0.0040	0.1344	0.0050	0.1528	0.0044	0.1576	0.0049
RADDA IN CHIANTI	0.2973	0.0110	0.1177	0.0130	0.1473	0.0111	0.1573	0.0158
RADICOFANI	0.2916	0.0124	0.1302	0.0167	0.1433	0.0127	0.1483	0.0171
RADICONDOLI	0.3148	0.0166	0.1447	0.0144	0.1678	0.0181	0.1712	0.0248
RAPOLANO TERME	0.2901	0.0076	0.1291	0.0079	0.1417	0.0075	0.1476	0.0100
SAN CASCIANO DEI BAGNI	0.2822	0.0097	0.1295	0.0145	0.1348	0.0098	0.1405	0.0127
SAN GIMIGNANO	0.2899	0.0070	0.1292	0.0070	0.1420	0.0071	0.1476	0.0097
SAN GIOVANNI D'ASSO	0.2994	0.0143	0.1327	0.0181	0.1506	0.0148	0.1560	0.0190
SAN QUIRICO D'ORCIA	0.2901	0.0091	0.1335	0.0114	0.1426	0.0094	0.1473	0.0121
SARTEANO	0.2881	0.0073	0.1265	0.0077	0.1399	0.0073	0.1464	0.0104
SIENA	0.3046	0.0047	0.1235	0.0035	0.1553	0.0048	0.1617	0.0055
SINALUNGA	0.2881	0.0056	0.1345	0.0068	0.1411	0.0057	0.1454	0.0070
SOVICILLE	0.3029	0.0059	0.1389	0.0081	0.1557	0.0065	0.1605	0.0081
TORRITA DI SIENA	0.2900	0.0067	0.1367	0.0067	0.1429	0.0067	0.1476	0.0084
TREQUANDA	0.2946	0.0117	0.1333	0.0130	0.1467	0.0119	0.1510	0.0169
Province of Siena	0.2998	0.0037	0.1341	0.0040	0.1530	0.0042	0.1574	0.0040
Tuscany	0.3069	0.0034	0.1406	0.0028	0.1601	0.0038	0.1624	0.0037