

INFORMAZIONI PERSONALI

**Gianni Betti**



 Dipartimento di Economia Politica e Statistica, P.zza San Francesco, 7 – 53100 Siena

 +39-0577-233084  +39-3470974524

 E-mail: [gianni.betti@unisi.it](mailto:gianni.betti@unisi.it)

Sesso M | Data di nascita 21/07/1970 | Nazionalità Italiana

ESPERIENZA PROFESSIONALE

01/01/2017 – ad oggi

**Professore Ordinario di Statistica Economica**

Università di Siena, Piazza San Francesco 8, 53100 Siena

- Ha lavorato su misure di povertà trasversali e longitudinali, multidimensionali, monetarie e non monetarie, assolute o relative, a livello nazionale o livello locale; metodi di stima della varianza; analisi sull'integrazione di diverse indagini europee.
- Ha insegnato corsi di Statistica Economica, Statistica Sociale e Statistica Applicata

**Attività o settore** : Università

01/06/2005 – 31/12/2016

**Professore Associato di Statistica Economica**

Università di Siena, Piazza San Francesco 8, 53100 Siena

- Ha lavorato su misure di povertà trasversali e longitudinali, multidimensionali, monetarie e non monetarie, assolute o relative, a livello nazionale o livello locale; metodi di stima della varianza; analisi sull'integrazione di diverse indagini europee.
- Ha insegnato corsi di Statistica Economica, Statistica Sociale e Statistica Applicata

**Attività o settore** : Università

01/06/2000 – 01/04/2005

**Ricercatore di Statistica Economica**

Università di Siena, Piazza San Francesco 7, 53100 Siena

- Ha lavorato su misure di povertà trasversali e longitudinali, multidimensionali, monetarie e non monetarie, assolute o relative, a livello nazionale o livello locale; metodi di stima della varianza; analisi sull'integrazione di diverse indagini europee.
- Ha insegnato corsi di Statistica Economica, Statistica Sociale e Statistica Applicata

**Attività o settore** : Università

01/09/1998 – 01/09/1999

**Temporary Lecturer in Statistics**

London School of Economics, London, UK

- Teaching Elementary Statistical Theory and Quantitative Methods for Social Research at undergraduate level; teaching Sampling Theory at the Master in Statistics, teaching Statistics for Economist at the Summer School in Economics; tutoring several students.

**Attività o settore** : Università

ISTRUZIONE E FORMAZIONE

- 1994-1997 **Dottorato in Statistica Applicata** **Conseguito**  
 Università di Firenze, Viale Morgagni, 59, Firenze, Italy  
 Dottore di ricerca in Statistica Applicata
- 1989 - 1994 **Laurea in scienze statistiche ed economiche** **110/110 cum laude**  
 Università di Siena, Piazza San Francesco 7, 53100 Siena (Italy)

COMPETENZE PERSONALI

Lingua madre **Italiano**

Altre lingue

	COMPRESIONE		PARLATO		PRODUZIONE SCRITTA
	Ascolto	Lettura	Interazione	Ascolto	Lettura
Inglese	C2	C2	C2	C2	C2

Livelli: A1/2 Livello base - B1/2 Livello intermedio - C1/2 Livello avanzato  
 Quadro Comune Europeo di Riferimento delle Lingue

- Competenze comunicative**
  - Buone competenze di comunicazione acquisite attraverso le molte esperienze come docente a corsi.
- Competenze professionali**
  - Metodi statistici per l'analisi longitudinale e trasversale dei dati; metodologie di stima della varianza; stima della povertà monetaria e non monetaria; cumulation di dati; stima per piccole aree.
- Competenze informatiche**
  - SAS 9.4, Microsoft Office 2013, Windows 7.
- Patente di guida**
  - B
- Dati personali**

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".

## Progetti di ricerca:

Date from- Date to	Location	Company	Position	Description
April 2019 – July 2019	Tunisia	World Bank	Principal Investigator	Planning and sampling design of the new Tunisian Household Budget Survey 2020
Feb 2019 – Sept 2020	Turkey	Fondazione Giacomo Brodolini	Statistician and sampler	Implementing the Turkish Household Financial and Consumption Survey for the Central Bank of the Republic of Turkey
Oct 2017 – Sept 2019	Albania, Bosnia and Erzegovina Kosovo, Montenegro	GOPA Consulting	Consultant	IPA 2015 Multi-beneficiary Statistical Cooperation Programme – Pilot Project 4.2 EU-SILC implementation
Oct 2018 – Nov 2019	Turkey	Turkstat	Consultant	IPA 2015 EU Grant Contract No. 14463.2015.003-2016-507 Grant Programme, the Contractor will provide the consultancy on “EU-SILC”
July 2018 – June 2019	Lithuania	EIGE - Fondazione Giacomo Brodolini	Statistician and sampler	Institutional mechanisms for gender equality and gender mainstreaming- Ref. EIGE/2018/OPER/02
June 2017 – May 2018	Montenegro	GOPA Consulting	Consultant	Enhanced statistical capacity and provision of economic and social statistics Ref. EuropeAid/136182/DH/SER/ME Contract number: IPA/2015/368-786
June 2014 – Nov 2015	Albania	World Bank	Principal Investigator	Tasks: Further updating poverty and inequality mapping in Albania.
March 2014 – Nov 2015	Albania	GOPA Consulting	Consultant	Several short term missions under the project IPA 2012 Multi-beneficiary Statistical Cooperation Programme Service Contract No. 14463.2013.001-2013.468
Oct 2013 – Nov 2013	Turkey	Turkstat	Consultant	Consultancy for Household Budget Survey, Action Code: IPA MBP 2011-HBS-01 under the Grant contract (IPA MBP 2011) Contract No. 60702.2011.003-2012.936
Apr 2013 – Nov 2014	Turkey	GOPA Consulting	Consultant	Several short-term missions in the frame of the EU-funded project on ‘Updating Statistical System in Turkey – Phase 3’ (USST III), providing assistance to TurkStat on “Statistics on Income and Living Conditions: poverty, inequality and living conditions”
Jan 2013 – Feb 2014	Montenegro	GOPA Consulting	Consultant	Several short term missions under the project IPA 2011 Multi-beneficiary Statistical Cooperation Programme, Service Contract No. 60702.2011.002-2012.945. Pilot Project: Income and Living Conditions - PP 17. Poverty, inequality and gender equality.
Jan 2013 – June 2014	Italy	European Commission	Researcher	7th Framework Program project e-Frame, European Framework for Measuring Progress. This project is financed by the European Commission, SSH 2011.6.2.1 Beyond GDP – Measuring economic performance and societal progress. Grant Agreement no 290520.
Dec 2010 – June 2015	Italy	European Commission	Statistician	7th Framework Program project: ENEGE, The gender Gap in Pensions in the EU. This project is financed by the European Commission, Directorate-General for Justice; Unit D2 'Equality between men and women', in the framework of a contract managed by the Fondazione Giacomo Brodolini.
May 2010 – Mar 2012	Macedonia	ICON Institut Public Sector GmbH	Consultant	Advising the State Statistical Office of the Republic of Macedonia on analysis of Survey on Income and Living Conditions (SILC) experience and EU SILC development as well as on Quality of Publications.

Date from- Date to	Location	Company	Position	Description
July 2009 – Dec 2010	Tajikistan	ICON Institut Public Sector GmbH	Consultant	Survey of Households, Money Remittances and Poverty – Tajikistan - Activity Code1 / Title: C10/ Assessment of actual situation and methodological advice.
Nov 2009 – May 2010	Albania	World Bank	Principal Investigator	Tasks: Updating poverty and inequality mapping in Albania. Gender inequality; children inequality; regional inequality.
Oct 2009 – Apr 2010	Ukraine	ICON Institut Public Sector GmbH	Consultant	Project: Development of State Statistical System for Monitoring the Social and Economic Transformations", Main Tasks: Improvement of methodology and statistics organization
Jan 2009 – Dec 2009	Malta	ICON Institut Public Sector GmbH	Expert in Social Statistics and Children Statistics	Conduction of a feasibility study on data on available or important data to be produced in Malta, carrying out a detailed study on the current situation in Malta, Analysis the results obtained from the pilot survey, Provision of bilateral support to NSO Malta. Poverty mapping; children poverty and inequality; gender poverty and inequality.
Mar 2008 – Mar 2011	Italy	European Commission	Researcher	Small Area Methods for Poverty and Living Conditions Estimates - SAMPLE – European Union 7th Framework Program - Project/Contract No: EU – FP7 - SSH-2007-1 Grant Agreement no 217565.
April 2008 – November 2009	Turkey	ICON Consortium	Consultant	Upgrading the Statistical System of Turkey - (USST II). Contract EuropeAid/124214/D/SER/TR – DELTUR/REG/ (2007)/A/8715
Jan 2006 – Dec 2007	Italy	Eurostat	Researcher	EU-SILC (Community statistics on income and living conditions): methodological studies to estimate the impact on comparability of the methods used.
Nov 2005 – June 2006	Italy	Tuscany Region	Principal Investigator	Poverty & Inequality Mapping in Tuscany
Nov 2005 – Apr 2006	Commonwealth of Dominica	Caribbean Development Bank	Principal Investigator	Poverty & Inequality Mapping in the Commonwealth of Dominica. This project is funded by the Caribbean Development Bank, trough the Ministry of Finance, Commonwealth of Dominica, Roseau.
Jan 2004 – April 2005	Italy	European Commission	Researcher	Project No. VT/2003/43, "Regional indicators to reflect social exclusion and poverty", funded by the EC, DG Employment and Social Affairs.
Nov 2002 – July 2003	Albania	World Bank	Principal Investigator	Poverty & Inequality Mapping in Albania, This project is funded by the World Bank trough Project Coordination Unit "Social Services Delivery Project", Tirana, Albania.
Jan 2002 – Dec 2003	Italy	Eurostat	Researcher	Statistical Services in the Field of EU-SILC, Statistics on Income and Living Conditions. 2001/S 183-125349. This project is being undertaken by ISR International Social Research, London, on behalf of Eurostat. LOT 2: Development of Appropriate modelling or imputation to Construct the EU-SILC Target Income Variables for each EU Member States.
Jan 2001 – July 2002	Italy	Eurostat	Researcher	Statistical services in the field of income, poverty and social exclusion and the new instrument on income and living conditions replacing the ECHP, reference 2000/S 145- 095181. This project is being undertaken by ORC Macro International Social Research which is a division of ORC International Ltd., on behalf of Eurostat, the Statistical

Date from- Date to	Location	Company	Position	Description
				Office of the European Communities. This project is divided into four Lots as follows: Lot 1: The new instrument on income and living conditions replacing the ECHP1 – The questionnaire and related concepts / classification. Lot 2: Methodological manual on income statistics for EU Member States. Lot 3: Social Reporting: 2nd report on Income Poverty and Social Exclusion in the European Union. Lot 4: The new instrument on income and living conditions replacing the ECHP - The sample.
Feb 2001 – October 2001	Italy	European Commission	Consultant	Study of the problem of Consumer Indebtedness – call for tenders N°. 2000/A5/007, Lot 1 – Statistical Aspects. This project is being undertaken by ORC Macro International Social Research which is a division of ORC International Ltd., on behalf of the European Commission Directorate-General for Health and Consumer Protection.
April 1996 – July 2001	Romania	Eurostat	Research assistant for Eurostat.	Technical Assistance to Romania: analysis of the current system of social statistics, analysis of the adequacy of the Romanian existing statistical resources for alternative systems of social statistical indicators, training and updating of Romanian official statisticians. This project will be concluded with a final visit in Romania from July the 18th to July the 25th 2001.

## Information bibliografiche

### SCOPUS:

Documents: 59

Citations: 594

H-index: 15

### GOOGLE SCHOLAR:

Documents: 136

Citations: 2558

H-index: 27

**Books**

1. Betti, G., Bettio, F., Georgiadis, T., Tinios P. (2015), *Unequal ageing in Europe: women's independence and pensions*; New York: Palgrave Macmillan.

**Edited books**

2. Betti G., Lemmi A. (2020, eds.), *Analysis of Socio-Economic Conditions: Insights from a Fuzzy Multidimensional Approach*. London and New York: Routledge.
3. Betti G., Lemmi A. (2013, eds.), *Poverty and Social Exclusion: New Methods of Analysis*. London and New York: Routledge.
4. Betti G., Lemmi A. (2008, eds.), *Advances on income inequality and concentration measures*. London and New York: Routledge.
5. Lemmi A., Betti G. (2006, eds.), *Fuzzy Set Approach to Multidimensional Poverty Measurement*. New York: Springer.

**Journal Articles**

6. Bettio, F., Ticci, E., Betti, G. (2020), Does gender equality reduce violence against women? [L'eguaglianza di genere riduce la violenza sulle donne?], *Rassegna Italiana di Sociologia*, **61(1)**.
7. Betti, G., D'Agostino, A., Gagliardi, F., Giusti, C. (2020), The integrated fuzzy and relative index for poverty analysis: a review of applications in the social sciences, *Studies of Applied Economics - Estudios de Economía Aplicada*, **38(1)**, pp.1-14.
8. Betti, G., D'Agostino, A., Ghellini, G., Longobardi, S. (2020), Measuring the impact of financial crisis on quality of life in Europe, *Economics Bulletin*, **40(1)**, pp. 292-307.
9. Bettio, F., Ticci, E., Betti, G. (2020), A fuzzy index and severity scale to measure violence against women, *Social Indicators Research*, **148(1)**, pp. 225-249.
10. Su, W., Betti, G. Ucar, B. (2020), Longitudinal measures of fuzzy poverty: a focus on Czechia, Hungary and Poland after the crisis, *Quality and Quantity*, **54**, pp. 27-41.
11. Betti G., Mangiacavalli L., Piccoli L. (2020), Women and Poverty: Insights from Individual Consumption in Albania, *Review of Economics of the Household*, **18(1)**, pp. 69-91.
12. Casini M., Bastianoni S., Gagliardi F., Gigliotti M., Riccaboni A., Betti G. (2019), Sustainable Development Goals Indicators: A Methodological Proposal for a Multidimensional Fuzzy Index in the Mediterranean Area, *Sustainability*, **11(4)**, 1198.
13. Ciani M., Gagliardi F., Riccarelli S. and Betti G. (2019), Fuzzy Measures of Multidimensional Poverty in the Mediterranean Area: A Focus on Financial Dimension, *Sustainability*, **11(1)**, 143.
14. Saladini F., Betti G., Ferragina E., Bouraoui F., Cupertino S., Canitano G., Gigliotti M., Autino A., Pulselli F.M., Riccaboni A., Bidoglio G., Bastianoni S. (2018), Linking the Water-Energy-Food Nexus and Sustainable Development Indicators for the Mediterranean Region, *Ecological Indicators*, **91**, pp. 689-697.
15. Betti, G., Consolandi, C., Eccles, R.G. (2018), The Relationship Between Investor Materiality and the Sustainable Development Goals. A Methodological Framework, *Sustainability*, **10(7)**, 2248.
16. Betti G., Bici R., Neri L., Thomo L., Sohnesen T.P. (2018), Local Poverty and Inequality in Albania, *Eastern European Economics*, **56(3)**, pp. 223-245.
17. Betti G., Gagliardi F. (2018), Extension of JRR Method for Variance Estimation of Net Changes in Inequality Measures, *Social Indicators Research*, **137(1)**, pp. 45-60.
18. Betti G., Gagliardi F., Verma V. (2018), Simplified Jackknife Variance Estimates for Fuzzy Measures of Multidimensional Poverty, *International Statistical Review*, **86(1)**, pp. 68-86.

19. Verma V., Lemmi A., Betti G., Gagliardi F., Piacentini M. (2017), How precise are poverty measures estimated at the regional level?, *Regional Science and Urban Economics*, **66**, pp. 175-184.
20. Betti G., Karadag M.A., Sarica O., Ucar B. (2017), How to Reduce the Impact of Equivalence Scales on Poverty Measurement: Evidence from Turkey, *Social Indicators Research*, **132(3)**, pp. 1023-1035.
21. Betti G. (2017), Quantifying the economic cost of children: a note on intertemporal equivalence scales, *Quality and Quantity*, **51(3)**, pp. 1197-1205.
22. Verma V., Betti G., Gagliardi F. (2017), Fuzzy measures of longitudinal poverty in a comparative perspective, *Social Indicators Research*, **130(2)**, pp. 435-454.
23. Betti G. (2017), What impact has the economic crisis had on Quality of Life in Europe?: A multidimensional and fuzzy approach, *Quality and Quantity*, **51(1)**, pp. 351-364.
24. Betti G. (2017), Fuzzy measures of quality of life in Germany: a multidimensional and comparative approach, *Quality and Quantity*, **51(1)**, pp. 23-34.
25. Betti G., Karadag M.A., Sarica O., Ucar B. (2017), Regional differences in equivalence scales in Turkey, *Economy of Region*, **13(1)**, pp. 63-69.
26. Betti G., Caruana E., Gusman S. and Neri L. (2015), Economic poverty and inequality at regional level in Malta: focus on the situation of children, *Economy of Region*, **11(3)**, pp. 114-122.
27. Betti G., Gagliardi F., Lemmi A. and Verma V. (2015), Comparative Measures of Multidimensional Deprivation in the European Union, *Empirical Economics*, **49(3)**, pp. 1071-1100.
28. Betti G. (2016), Fuzzy measures of quality of life: a multidimensional and comparative approach, *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, **24**, Suppl. 1, pp. 25-37.
29. Crescenzi F., Betti G., Gagliardi F. (2016), Comparing small area techniques for estimating poverty measures: the case study of Austria and Spain, *Economy of Region*, **12(2)**, pp. 80-88.
30. Betti G., Soldi R., Talev I. (2016), Fuzzy Multidimensional Indicators of Quality of Life: The Empirical Case of Macedonia, *Social Indicators Research*, **127(1)**, pp. 39-53.
31. Kreter A.C., Betti G., Del-Vecchio R. and Staduto J.A.R. (2015), The Siena Micro-Simulation Model (SM2): a contribution for informality studies in Brazil, *Quality and Quantity*, **49(6)**, pp. 2251-2268.
32. Betti G., Gagliardi F. and Salvucci V. (2014), Multidimensional and Fuzzy Measures of Poverty at Regional Level in Mozambique, *Economy of Region*, **2014(4)**, pp. 114-128.
33. Betti, G. (2014), The effect of equivalence scales on poverty at Oblast level in Ukraine, *Economy of Region*, **2014(2)**, pp. 78-88.
34. Betti G., Lundgren L. (2012), The impact of remittances and equivalence scales on poverty in Tajikistan, *Central Asian Survey*, **31(4)**, pp. 395-408.
35. Zannolli R., Buoni S., Betti G., Salvucci S., Plebani A., Soresina A., Pietrogrande M.C., Martino S., Leuzzi V., Finocchi A., Micheli R., Rossi L.N., Brusco A., Misiani F., Fois A., Hayek J., Kelly C., Chessa L. (2012), A Randomized Trial of Oral betamethasone to reduce ataxia symptoms in ataxia telangiectasia, *Movement Disorders*, **27(10)**, pp. 1312-1316.
36. Betti G., Gagliardi F., Lemmi A., Verma V. (2012), Sub-national indicators of poverty and deprivation in Europe: methodology and applications, *Cambridge Journal of Regions, Economy and Society*, **5(1)**, pp. 149-162.
37. Betti G., D'Agostino A., Neri L. (2011), Educational Mismatch of Graduates: a Multidimensional and Fuzzy Indicator, *Social Indicators Research*, **103(3)**, pp. 465-480.

38. Verma V., Betti G. (2011), Taylor linearization sampling errors and design effects for poverty measures and other complex statistics, *Journal of Applied Statistics*, **38(8)**, pp. 1549-1576.
39. Betti G., Donatiello G., Verma V. (2011), The Siena Micro Simulation Model (SM2) for net-gross conversion of EU-SILC income variables, *International Journal of Microsimulation*, **4(1)**, pp. 35-53.
40. Zannolli R., Buoni S., Tassini M., De Nicola A., Betti G., De Felice C., Orsi A., Varetti M.C., Ferrara F., Messina M., Giannini C., Mohn A., Chiarelli F., Liberati M., Strambi M., Funghini S., Vivi A., Wevers R.A., Hayek J. (2010), Silent increase of urinary ethylmalonic acid is an indicator of nonspecific brain dysfunction, *NMR in Biomedicine*, **23**, pp. 353-358.
41. Betti G., Verma V. (2009), Fuzzy measures of the incidence of relative poverty and deprivation: a longitudinal and comparative perspective, *Advances and Applications in Statistics*, **12(2)**, pp. 235-273.
42. Ballini F., Betti G., Carrette S., Neri L. (2009), Poverty and Inequality mapping in the Commonwealth of Dominica, *Estudios Economicos*, **24**, pp. 123-162.
43. Aassve A., Betti G., Mazzuco S., Mencarini L. (2008), Marital disruption and economic wellbeing, *Significance, The Royal Statistical Society*, **5(3)**, pp. 108-111.
44. Betti G., Ballini F. (2008), Variance estimates of poverty and inequality measures in Albania, *Eastern European Economics*, **46(6)**, pp. 87-101.
45. Betti G., Verma V. (2008), Fuzzy measures of the incidence of relative poverty and deprivation: a multi-dimensional perspective, *Statistical Methods and Applications*, **17(2)**, pp. 225-250.
46. Verma V., Betti G., Ghellini G. (2007), Cross-sectional and longitudinal weighting in a rotational household panel: applications to EU-SILC, *Statistics in Transition*, **8(1)**, pp. 5-50.
47. Aassve A., Betti G., Mazzuco S., Mencarini L. (2007), Marital Disruption and Economic Well-being; A Comparative Analysis, *Journal of the Royal Statistical Society, Series A*, **170(3)**, pp. 781-799.
48. Betti G., Dourmashkin N., Rossi M.C., Yin Y.P. (2007), Measuring and Characterising Consumer Over-Indebtedness in the European Union Member Countries, *Journal of Economic Studies*, **34(2)**, pp. 136-156.
49. Verma V., Betti G. (2006), EU Statistics on Income and Living Conditions (EU-SILC): Choosing the survey structure and sample design, *Statistics in Transition*, **7(5)**, pp. 935-970.
50. Betti G., Lemmi A., Verma V. (2005), School-to-work transitions in the European Union: evidence from the ECHP. *Innovation: The European Journal of Social Science Research*, **18(4)**, pp. 419-442.
51. Neri L., Ballini F., Betti G. (2005), Poverty and inequality mapping in transition countries, *Statistics in Transition*, **7(1)**, pp. 135-157.
52. Betti G., Cheli B., Cambini R. (2004), A statistical model for the dynamics between two fuzzy states: theory and application to poverty analysis, *Metron*, **62(3)**, pp. 391-411.
53. Molnar M., Betti G., Panduru F. (2003), Consumption pattern and equivalence scales in Romania, *Romanian Economic Review*, **12(2)**, pp. 207-221.
54. Betti G., D'Agostino A., Neri L., (2002), Panel Regression Models for Measuring Multidimensional Poverty Dynamics, *Statistical Methods and Applications*, **11(3)**, pp. 359-369.
55. Betti G. (1999), A Non-parametric approach to equivalence scales, *Statistics in Transition*, **4(2)**, pp. 181-194.
56. Cheli B., Betti G. (1999), Totally Fuzzy and Relative Measures of Poverty Dynamics in an Italian Pseudo Panel, 1985-1994, *Metron*, **57(1-2)**, pp. 83-104.

#### Articles on national journals

57. Betti G., Maitino M.L., Sciclone N. (2012), A cosa servono i modelli di micro simulazione? Tre applicazioni usando MICROREG, *Scienze Regionali, Italian Journal of Regional Science*, **11(1)**, pp. 101-120.

58. Lemmi A., Betti G., Tarditi G., Verma V. (2011), New poverty measures to meet local policy needs: the cumulation method, *Rivista Italiana di Economia, Demografia e Statistica*, **65(2)**, pp. 83-100.
59. Betti G., D'Agostino A., Lemmi A., Quintano C. (2009), A parametric model for estimating fuzzy poverty measures and relative standard errors, *Politica Economica*, **25(3)**, pp. 279-299.
60. Betti G., Lemmi A., Verma V. (2009), Multidimensional aspects of poverty and living conditions: the estimation at Regional level, *Rivista Italiana di Economia, Demografia e Statistica*, **63(1/2)**, p. 27-47.
61. Betti G., Cheli B., Lemmi A., Verma V. (2006), On the construction of fuzzy measures for the analysis of poverty and social exclusion, *Statistica & Applicazioni*, **4(1)**, pp. 77-97.
62. Betti G., Verma V., Ballini F., Natilli M., Galgani, S. (2003), Statistical Imputation in Conjunction with Micro-Simulation of Income Data, *Rivista Italiana di Economia, Demografia e Statistica*, **58(3)**, pp. 35-43.
63. Betti G. (2001), Intertemporal equivalence scales and cost of children using panel data, *Statistica Applicata*, **13(3)**, pp. 197-210.

### Working papers

64. Marano G., Betti G., Gagliardi F. (2014), Latent class Markov models for addressing measurement problems in poverty dynamics, Working Paper N. 649, Department of Economics and Statistics, University of Siena.
65. Donatiello G., Betti, G., Consolini, P. (2012), The Construction of Gross Income Variables of Eusilc (Eu Statistics on Income and Living Conditions) in Italy: A Mixed Strategy Using Microsimulation and Administrative Data, Working Paper N. 652, Department of Economics and Statistics, University of Siena.
66. Betti, G., Gagliardi, F., Salvucci V., (2012), Multidimensional and Fuzzy Measures of Poverty and Inequality at National and Regional Level in Mozambique, Working Paper N. 649, Department of Economics and Statistics, University of Siena.
67. Verma V., Betti G., Gagliardi F. (2010), An assessment of survey errors in EU-SILC, Eurostat Methodologies and Working papers, Luxembourg: Publications Office of the European Union.
68. Verma V., Betti G., Gagliardi F. (2010), Robustness of some EU-SILC based indicators at regional level, Eurostat Methodologies and Working papers, Luxembourg: Publications Office of the European Union.
69. Neri L., Gagliardi F., Ciampalini G., Verma V., Betti G. (2009), Outliers at upper end of income distribution (EU-SILC 2007), Working Paper n. 86, Dipartimento di Metodi Quantitativi, Università di Siena.
70. Betti G., Buttigieg S., Caruana E., Neri L. (2009), Child poverty and inequality mapping in Malta, Working Paper n. 85, Dipartimento di Metodi Quantitativi, Università di Siena.
71. Betti G., Ferretti C., Gagliardi F., Lemmi A., Verma V. (2009), Proposal for new multidimensional and fuzzy measures of poverty and inequality at national and regional level, Working Paper n. 83, Dipartimento di Metodi Quantitativi, Università di Siena.
72. Ciampalini G., Betti G., Verma V. (2009), Comparability in self-employment income (EU-SILC 2004-2007), Working Paper n. 82, Dipartimento di Metodi Quantitativi, Università di Siena.
73. Ballini F., Betti G., Çalik G., Daşkıran Z., Karakaş M. (2009), The Siena Micro-Simulation Model (SM2) for the tax-benefit system in Turkey, Working Paper n. 81, Dipartimento di Metodi Quantitativi, Università di Siena.
74. Betti G., D'Agostino A., Neri L. (2007), Educational Mismatch of Graduates: a Multidimensional and Fuzzy Approach, Working Paper n. 71, Dipartimento di Metodi Quantitativi, Università di Siena.
75. Neri L., Ballini F., Betti G., Lemmi A. (2007), Poverty and Inequality Mapping in Tuscany, Working Paper n. 69, Dipartimento di Metodi Quantitativi, Università di Siena.
76. Betti G., Gagliardi F., Nandi T. (2007), Jack-knife variance estimation of differences and averages of poverty measures, Working Paper n. 68, Dipartimento di Metodi Quantitativi, Università di Siena.

77. Verma V., Betti G., Ghellini G. (2006), An integrated cross-sectional and longitudinal weighting procedure for EU-SILC, Working Paper n. 67, Dipartimento di Metodi Quantitativi, Università di Siena.
78. Ballini F., Betti G., Neri L. (2006), Poverty and Inequality Mapping in the Commonwealth of Dominica, Working Paper n. 66, Dipartimento di Metodi Quantitativi, Università di Siena.
79. Betti G., Ballini F., Neri L. (2006), The Survey of Living Conditions in the Commonwealth of Dominica: a revision, Working Paper n. 65, Dipartimento di Metodi Quantitativi, Università di Siena.
80. Aassve A., Betti G., Mazzucco S., Mencarini L. (2006), Marital Disruption and Economic Well-being; A Comparative Analysis, Working Paper of Institute for Social and Economic Research, paper 2006-07. Colchester: University of Essex.
81. Betti G., Cheli B., Verma V. (2006), On longitudinal analysis of poverty conceptualised as a fuzzy state, Society for the Study of Economic Inequality Working papers Series, ECINEQ WP 2006 – 32.
82. Betti G., Lemmi A., Natilli M., Verma V. (2006), Indicators of social exclusion and poverty in Europe's regions, Working Paper n. 59, Dipartimento di Metodi Quantitativi, Università di Siena.
83. Betti G., Verma V. (2006), Approximate variance estimates of poverty measures for the application of EBLUP for small-area estimation, Working Paper n. 57, Dipartimento di Metodi Quantitativi, Università di Siena.
84. Verma V., Betti G. (2005), Sampling errors and design effects, Working Paper n. 53, Dipartimento di Metodi Quantitativi, Università di Siena.
85. Neri L., Ballini F., Betti G. (2005), Poverty and inequality mapping in transition countries, Working Paper n. 52, Dipartimento di Metodi Quantitativi, Università di Siena.
86. Betti G., Verma V. (2004), A methodology for the study of multi-dimensional and longitudinal aspects of poverty and deprivation, Working Paper n. 49, Dipartimento di Metodi Quantitativi, Università di Siena.
87. Betti G., Lemmi A., Verma V. (2004), School-to-work transitions in the European Union: evidence from the ECHP, Working Paper n. 48, Dipartimento di Metodi Quantitativi, Università di Siena.
88. Lemmi A., Pannuzi N., Valentini P., Cheli B., Betti G. (2004), Estimating Multidimensional Poverty: A Comparison of Three Diffused Methods, Report n. 259, Dipartimento di Statistica e Matematica Applicata all'Economia, Università di Pisa.
89. Verma V., Betti G. (2004), Sampling issues in Eu-Silc surveys, Working Paper n. 45, Dipartimento di Metodi Quantitativi, Università di Siena.
90. Betti G., Dourmashkin N., Rossi M.C., Yin Y.P. (2003), Consumer over-indebtedness and income distribution in the EU, *Working Paper UHBS 2003-7*, Business School, University of Hertfordshire.
91. Betti G., Verma V., Natilli M., Ballini F. (2003), *Statistical imputation in conjunction with micro-simulation of income data*. Working Paper n. 55 della serie "Dinamiche e persistenze nel mercato del lavoro italiano ed effetti di politiche (basi di dati, misura, analisi)", Dipartimento di Scienze Statistiche, Università di Padova, Settembre 2003.
92. Verma V., Betti G., Ballini F., Natilli M., Galgani S. (2003), *Personal income in the gross and net forms: Applications of the Siena Micro-Simulation Model (SM2)*. Working Paper n. 54 della serie "Dinamiche e persistenze nel mercato del lavoro italiano ed effetti di politiche (basi di dati, misura, analisi)", Dipartimento di Scienze Statistiche, Università di Padova, Settembre 2003.
93. Verma V., Betti G. (2003), *Longitudinal measures of income poverty and life-style deprivation*, Working Paper n. 50 della serie "Dinamiche e persistenze nel mercato del lavoro italiano ed effetti di politiche (basi di dati, misura, analisi)", Dipartimento di Scienze Statistiche, Università di Padova, Aprile 2003.
94. Betti G., Molnar M., Panduru F. (2002), New equivalence scales for Romania, Working Paper n. 39, Dipartimento di Metodi Quantitativi, Università di Siena.

95. Ballini F., Betti G., Brogi F., Natilli M. (2001), Equivalence Scales in the European Integrated System for Poverty Analysis (EURO-SIAP), Working Paper n. 33, Dipartimento di Metodi Quantitativi, Università di Siena.
96. Betti G., D'Agostino A., Neri L. (2000), Panel Regression Models for Measuring Poverty Dynamics in Great Britain, *ISER Working Papers*. Paper 42/2000, Colchester: University of Essex.
97. Betti G., Cheli B., Lemmi A. (2000), Analisi delle dinamiche di povertà e disoccupazione su uno pseudo panel Italiano, Working Paper n. 21 della serie Lavoro e disoccupazione: questioni di misura e di analisi, Dipartimento di Scienze Statistiche, Università di Padova.
98. Betti G., Cheli B., Lemmi A. (1999), Occupazione e condizioni di vita su uno pseudo panel italiano: primi risultati, avanzamenti e proposte metodologiche, Working Paper n. 17 della serie Lavoro e disoccupazione: questioni di misura e di analisi, Dipartimento di Scienze Statistiche, Università di Padova.
99. Betti G. (1999), Intertemporal equivalence scales and cost of children, *Statistics Research Report LSERR51*, London School of Economics.
100. Betti G. (1999), Quadratic Engel curves and household equivalence scales: the case of Italy 1985-1994, *Statistics Research Report LSERR50*, London School of Economics.
101. Betti G., (1999), Nonparametric equivalence scales with application to Poland, *Statistics Research Report LSERR49*, London School of Economics.
102. Betti G. (1998), Intertemporal equivalence scales and cost of children using BHPS, *ERSC Research Centre on Micro-social Change Working Papers*. Paper 11/98, Colchester: University of Essex.
103. Betti G., Verma V. (1998), Measuring the degree of poverty in a dynamic and comparative context: a multi-dimensional approach using fuzzy set theory, Working Paper n. 22, Dipartimento di Metodi Quantitativi, Università di Siena.

#### Research reports

104. Bettio F., Tinios P., Betti G. (2015), *Men, Women and Pension*, Luxembourg: Publication Offices of the European Union, ISBN 978-92-79-47780-5.
105. Betti G., Soldi R., Talev I. (2014), *Trends in Quality of Life - Former Yugoslav Republic of Macedonia: 2007-2012*, Dublin: Eurofound.
106. Bettio F., Tinios P., Betti G. (2013), *The gender Gap in Pension in the EU*, Luxembourg: Publication Offices of the European Union, ISBN 978-92-79-29914-8.
107. Betti, G. (2010), *Proposal for new equivalence scales for Tajikistan*, Report to the State Statistical Office of Tajikistan, Dushanbe, December 2010.
108. Betti G., Neri L. (2010), *Further updating poverty mapping in Albania*, Final Report to the World Bank, December 2010.
109. Betti, G. (2009), *Effects of equivalence scales on inequality and poverty in Ukraine*, Report to the State Statistics Committee of Ukraine, Kiev, December 2009.
110. Betti G., Ballini F., Neri L. (2006), *Poverty and Inequality Mapping in the Commonwealth of Dominica*, Final Report to the Caribbean Development Bank, July 2006.
111. European Commission (2005), *Regional Indicators to reflect social exclusion and poverty*. Report prepared for Employment and Social Affairs DG - with contribution of Gianni Betti, Achille Lemmi, Anna Mulas, Michela Natilli, Laura Neri, Nicola Salvati, and Vijay Verma.
112. Verma V., Betti G., Ballini F., Natilli M., Galgani S. (2004), Income in EU-SILC: Net/Gross/Net conversion. Report on common structure of the model; model description and application to the ECHP data for France, Italy and Spain, *EU-SILC 133/04*, Eurostat, Luxembourg.
113. Betti G. (2003), *Poverty and Inequality Mapping in Albania*, Final Report to the World Bank, July 2003.



114. Betti G., Natilli M., Ballini F., Verma V. (2003), Income in EU-SILC: Net/Gross/Net Conversion Draft Report on Common Structure of The Model; Model Description and Application to the ECHP data for Spain, *EU-SILC 122/03*, Eurostat, Luxembourg.
115. Verma V., Betti G. (2002), The construction of EU-SILC target variables on income: some proposal for discussion, Report to EUROSTAT under the project Development of appropriate modelling or imputation to construct the EU-SILC target income variables for each EU Member States.
116. Betti G., Dourmashkin N., Rossi M.C., Verma V., Yin Y.P. (2001), Study of the problem of Consumer Indebtedness: Statistical Aspects, Final Report Submitted to Commission of the European Communities, Directorate-General for Health & Consumer protection.

**Other publications**

117. Betti G. (2004), La rilevazione dei dati e la costruzione delle stime nelle indagini sul lavoro minorile, in *Bambini e Adolescenti che Lavorano - Un panorama dall'Italia all'Europa*, *Questioni e Documenti*, **30**, pp. 38-47, Istituto degli Innocenti, Firenze.
118. Betti G., Maccari F. (2002), Indagine ALMALAUREA sulla Condizione Occupazionale dei Laureati negli anni 1999 e 2000, in *Rapporto 2001 del Nucleo di Valutazione*, pp. 371-380, Università di Siena, Dicembre 2002.
119. Betti G. (1998), Scale di equivalenza intertemporali: un'applicazione sulla base dello pseudo panel dell'indagine ISTAT sui Consumi delle Famiglie 1985-1994, Tesi di Dottorato, Università di Firenze.

Siena, 3 Marzo 2020



Gianni Betti