

Lisa Grace S. Bersales, Ph.D.

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Education

BS Statistics, Cum Laude, U.P. Diliman, 1978
MS Statistics, U.P. Diliman, 1981
PhD Statistics, U.P. Diliman, 1989

Employment (in the University of the Philippines)

- Professor of Statistics (2001 – Present)
- Vice President for Planning and Finance (February 10, 2011- Present)
- Dean, School of Statistics (1996 – 1998, 2002-2008)
- Director for Graduate Studies (1989 – 1984; 1996 –1997)
- Associate Professor of Statistics (1991 – 2000)
- Assistant Professor of Statistics (1981 – 1990)
- Instructor of Statistics (1980)

Membership in Professional Societies

- Member, International Statistical Institute, 2005 – present
- Member, International Association for Statistics Education, 2007-present
- Member, Philippine Statistical Association, 1982 – present
- Associate Member, National Research Council of the Philippines, 1998-present
- Trustee, University of the Philippines Statistical Center Research Foundation, Inc., 2002-present

Awards

- 2009-10: BSP Sterling Professorial Chair on Government and Official Statistics
- 2009: Best Scientific Poster Award for the paper , with Dennis S, Mapa, "The Young, the Elderly and Household Saving: Evidence from the Philippines," from the National Academy of Science and Technology (NAST), July 09, 2009, The Manila Hotel.
- 2002 -08; 1997-98: Roberto Coyuito Professor of Statistics, University of the Philippines
- 1992: Visiting Researcher, Statistics Canada
- 1990: Central Bank Jubilee Assistant Professor of Statistics, University of the Philippines
- 1989: Fellow, Statistical Research and Training Center
- 1987: Fellow, University of Pennsylvania
- 1985-89: Ph.D. Fellow, UNDP
- 1978-80: M.S. Fellow, NEDA
- 1978: Cum Laude
- 1978: Member, Phi Kappa Phi Honor Society

Membership in U.P. Committees

- Member, UPD Oversight Committee on Admission, 2011
- Chair, Committee to Review Graduate Tuition, 2007-2008
- Chair, UPD Cluster Curriculum Committee, 2008
- Member, UPD Curriculum Committee, 2001-2007
- Member, UPD Committee to Review Freshman Admission, 2004

Membership in Committees for Government Agencies

- Member, CHED Technical Committee in Mathematics, 2008
- Member , Committee to Review the Philippine Statistical System, 2007

- Chairman/Technical Consultant, Technical Committee and Technical Working Group to Oversee the Seasonal Adjustment for Philippine Time Series, January 1994 – April 1995, January 1997 – present
- Member, Technical Committee on Poverty Statistics, January 2004 - present

Ongoing and Recent Research Projects

- Construction of a Socioeconomic Classifications for Philippine Households Based on FIES 2009 with MORES-NSO, ongoing
- Evaluation of the Impact of Health Reform on the Responsiveness of the Philippine Health System, ongoing
- Mid-Term Review of the Mindanao Rural Development Program2 for DA, 2011
- Basic Education Resources Survey for DepEd, 2009-2011
- Evaluation of the Criteria for Minimum Wage Fixing: Some Empirical Evidences for NWPC, 2010
- 2009 IJM Baseline Study on Commercial Sexual Exploitation of Minors (CSEC) for the International Justice Mission, 2009

Publications and Papers

- Alberto, A., Bersales, L., 2012, Econometric Modeling of Panel Data on the Saving Patterns of Philippine Agricultural Households, *The Philippine Statistician*, 61(1):69-86
- E. Reston and L. Bersales, 2011, Reform Efforts in Training Mathematics Teachers to Teach Statistics: Challenges and Prospects, in Batnanero, Burrill, Reading eds., **Teaching Statistics in School Mathematics - Challenges for Teaching and Teacher Education**, Heiderlberg: Springer.
- **Length of a Time Series for Seasonal Adjustment: Some Empirical Experiments** , *The Philippine Statistician*, 2011.
- **Reform Efforts in Training Statistics Teachers in the Philippines: Challenges and Prospects**, co-authored with Enriqueta Reston, in *Teaching Statistics in School Mathematics-Challenges for Teaching and Teacher Education* , Carmen Batanero, G. Burril, C. Reading, and A. Rossman(Editors), Verlag, 2011.
- **The Teaching of Statistics in the Philippines: Moving to a Brighter Future**, paper presented at the 8th International Convention on Statistics, Ljubljana, Slovenia, 13 July 2010.
- **Enhancing Seasonal Adjustment of Philippine Time Series: Procedures under Seasonal Volatilities**, Bangko Sentral ng Pilipinas Professorial Sterling Chair on Government and Official Statistics Lecture in honor of Prof. Angeles R. Buenaventura, 11 December 2009, Quezon City, Philippines.
- **Evaluation of the Criteria for Minimum Wage Fixing: Some Empirical Evidences**, Paper for the Wage Forum of the National Wages and Productivity Commission, October 28, 2009, Manila, Philippines.
- **The Young, The Elderly, and Household Savings: Evidence from the Philippines**, co-authored with Dennis S. Mapa, **poster paper at the** National Academy of Science and Technology, 31st Annual Scientific Meeting, 08-09 July 2009; Manila, Philippines.
- **A Strategic Plan for a Philippine Health Information System, for the Department of Health** , Proceedings of the 2009 Health Forum , March 2009.
- **Imputation of Missing Data using Time Series Models: An Alternative Method for MISSI and PPS**, for the National Statistics Office, March 2009.
- **Comprehensive Documentation and Analysis of Issues on the Official Poverty Estimation Methodology of the Philippines**, for PIDS-NEDA, April 2009
- **Population Dynamics and Household Saving: Evidence from the Philippines**, co-authored with Dennis S. Mapa, *The Philippine Statistician*, 2008.
- **Academic Programs in Statistics in the Philippines**, *The Philippine Statistician*, Special Issue 2006, vol. 55: 3-4.

- **The Equivalence of Analysis Based on ANOVA Models and Analysis Based on Regression Models with Dummy Variables**, co-authored with Leah A. Araneta and Frumencio F. Co, U.P. Visayas Journal of Natural Sciences, vol.11:95-106(2006).
- **Saving Patterns and Behavior of Agricultural Households**, paper presented for the Roberto Coyuito Professorial Chair, December 17, 2007.
- **Determinants of Household Saving in the Philippines**, co-authored with Dennis S. Mapa, paper presented at the 56th Session of the International Statistical Institute, Lisboa, Portugal, August 22-29, 2007.
- **Academic Programs in Statistics in the Philippines: An Update in 2006**, paper presented at the 10th National Convention of Statistics, Mandaluyong, October 1-2, 2007.
- **Strengthening statistical capacity to improve MDG data: Training Manual on the Assessment and Dissemination of MDG Indicators**, paper presented at the 2007 International Conference on the Millennium Development Goals Statistics (ICMDGS), Mandaluyong, October 1-3, 2007.
- **Current Methodologies and Results of Seasonally Adjusting the Selected Philippine Time Series**, co-authored with the TWG on Seasonal Adjustment of Philippine Time Series, paper presented at the 10th National Convention of Statistics, Mandaluyong, October 1-2, 2007.
- **Co-movement Between ENSO and Agricultural Production in Asia**, co-authored with Erniel B. Barrios, paper presented at the 10th National Convention of Statistics, Mandaluyong, October 1-2, 2007.
- **“Profile of Household Saving in the Philippines (1985 – 2003)”**, with Dennis S. Mapa, a chapter in the Final Report on the EMERGE Technical Assessment on Saving Patterns and Behavior, July 2006
- **“A Study on the Determinants of Household Saving in the Philippines (1988 – 2003)”**, with Dennis S. Mapa, a chapter in the Final Report on the EMERGE Technical Assessment on Saving Patterns and Behavior, July 2006
- **“Constructing a Composite Leading Economic Indicator for the Philippines using Principal Components of Indicator Series”**, a paper presented at the 55th Session of the International Statistical Institute on April 5 – 12, 2005, Sydney, Australia.
- **“A Composite Leading Economic Indicator for the Philippines”**, with Regina Reyes and Joseph de Guia, a paper presented at the 9th National Convention of Statistics on October 4-5, 2004, Mandaluyong, Philippines.
- **“Tourism As a Political Platform: Residents’ Perceptions of Tourism and Voting Behavior,”** with Reil Cruz, a paper presented at the Tourism, Politics and Democracy Conference 2004, sponsored by the Centre for Tourism Policy Studies (CENTOPS), on September 9-10, 2004, University of Brighton, United Kingdom.
- **“The Role of the Academe in the Continuing Development of the Statistical Manpower of the Philippine Statistical System: The UP School of Statistics Perspective”**, a paper presented at the 9th National Convention of Statistics on October 4-5, 2004, Mandaluyong, Philippines.
- **“Academic Programs in Statistics”**, a paper presented at the 9th National Convention of Statistics on October 4-5, 2004, Mandaluyong, Philippines.
- **“An Illustration of the Significance of Statistics to the Tourism Industry”**, a paper presented at the University of Sto. Tomas Symposium on Statistics: Its Significance to the Tourism Industry in celebration of the 14th National Statistics Month, Manila, October 6, 2003, Manila, Philippines.
- **“State of Higher Level Statistics Education in the Philippines**, a paper presented at the Tito A. Mijares Research Conference, Pasig, September 25, 2003, Mandaluyong, Philippines.
- **“Statistics in Research and Development”**, a paper presented at the U.P. Diliman College of Science Research Conference, April 19, 2003, Quezon City, Philippines.
- **“The Equivalence of ANOVA Models and Regression with Dummy Variables,”** with Frumencio Co and Leah Armada, presented at the School of Statistics Faculty-Student Research Conference, September 2002, Quezon City, Philippines.

- **“The Use of Exponential Smoothing Equations in Seasonal Adjustment: Some Empirical Illustrations”**, presented at the School of Statistics, 2002.
- **“Why Do Naïve Exponential Smoothing Procedures Forecast Well? (The Equivalence of Forecasts from Exponential Smoothing Procedures and Forecasts from ARIMA Models)”**, presented in the Roberto Coyuito Professorial Chair Lecture on March 6, 2002.
- **“Some Illustrations of Using Econometric Methods in Building Models for Napocor Electricity Sales in Luzon and Gross Domestic Product of the Philippines”**, 2001.
- **“The Philippines: A Century Ago”**, with Gervacio Selda, presented at the Seventh Convention of Statistics, Manila, 1998.
- **“Teaching Statistics to Employees of Statistical Agencies in the Philippines”**, in the proceedings of the 50th session of the International Statistical Institute, Beijing, 1995.
- **“Monthly Forecasting Equations for Philippine Climatological Variables of Selected Areas and Different Climate Types”**, submitted to the Philippine Statistical Association-ASSIST, 1994.
- **“A Descriptive Analysis of Climatological Variables in Selected Areas with Different Climate Types”**, submitted to the Philippine Statistical Association-ASSIST, 1994.
- **“Combination of Estimators: A Solution to Multicollinearity”**, with Gaye Parcon, 1993.
- **“The Statistical Analysis of Structural Change”**, a Roberto Coyuito Professorial Chair paper, 1993.
- **“The Seasonal Adjustment of Philippine Time Series Using X11ARIMA”**, The Philippine Statistician, pp. 1-7, vol.42, 1993.
- **“Bilinear Systematic Sampling”**, with Mool Chandra Agrawal and Andre Acosta, in the proceedings of the UNDP-UP System ESEP Research Conference, 1990.
- **“Dummy Variables versus Allocated Codes in Regression Models”**, A Central Bank Jubilee professorial chair paper, 1990.
- **“Combination of Quarterly and Monthly Forecasts”**, with Roberto Mariano and Daniel Bonzo, in the proceedings of the UNDP-UP System ESEP Research Conference, 1990.
- **“The Use of Ordinary Least Squares and Generalized Least Squares in Combining Forecasts”**, in the proceedings of the UP Statistical Center Seminar on Theoretical and Applied Statistics, 1989.
- **“The Development of an Instrument for Determining Poor Households”**, with Angeles Buenaventura and Gloria Caldito, in the proceedings of the Third Convention on Statistics, Manila, 1982.

Training Manuals

- Manual on Forecasting of Receipts and Expenditures of the LGUs using the Bureau of Local Government Finance Models, under the Statistical Research and Training Center, 2008.
- Training Manual for a Training on Trainers on Assessing Development Projects' Impacts on Poverty, for UN-SEAMEO-SEARCA, 2005.
- Training Manual for Statistics Program of the Bangko Sentral ng Pilipinas Institute, with Prof. Dennis Mapa, 2005.
- The Seasonal Adjustment of Time Series with Applications to Philippine Data with Genelyn Ma. Sarte, 2000.
- Training Manual on Seasonal Adjustment Using x11 ARIMA/88”, for the Asian Development Bank, 1994
- Training Manual in Advanced Econometrics, for the National Power Corporation, 1991
- Training Manual on Time Series Analysis and Forecasting”, for the National Power Corporation, 1991

Recent Seminars and Conferences

- **Presenter**, *The Teaching of Statistics in the Philippines: Moving to a Brighter Future*, 8th International Convention on Statistics, Ljubljana, Slovenia, 13 July 2010
- **Presenter**, Wage Forum, National Wages and Productivity Commission, October 28, 2009, Manila, Philippines

Details on Research Projects Done

Date / Employer : May 2009 – February 2010
Position : **Statistician**
Project / Location : Philippines
Tasks : Provide inputs to the questionnaire and statistical tables and statistics for reporting the results of the survey

Date / Employer : 2008 to date United Laboratories
Position : **Statistician**
Project / Location : Philippines
Project Title : **Various projects**
Tasks : Developed forecasting procedure for offtake of products, developed an index of employee performance, provides statistical advise on various concerns of the business analytics division.

Date / Employer : May – October 2009/U.P. Statistical Center Research Foundation
Position : **Researcher**
Project / Location : Philippines
Project Title : **Evaluation of the Criteria for Minimum Wage Fixing: Some Empirical Evidences**
Tasks : Do research on minimum wage fixing and present paper in a forum.

Date / Employer : April-June 2009/International Justice Mission
Position : **Statistician**
Project / Location : Manila, Philippines
Project Title : **2009 IJM Baseline Study on Commercial Sexual Exploitation of Minors(CSEC)**
Tasks : Develop the sampling design for the survey covering Manila, Pasay, Paranaque establishments, analyse the results of the investigation, specifically estimate prevalence.

Date / Employer : July – October 2009/Statistical Research and Training Center
Position : **Trainer/Resource Person**
Project / Location : Philippines and Cambodia
Project Title : Statistical Capacity Building for the Economic and Public Finance Policy Department (EPFPD) Ministry of Economy and Finance (MEF) of Cambodia
Tasks : Lectured on Econometrics and supervised the development of econometric models for macro-economic indicators of Cambodia.

Date / Employer : July 2008 – March 2009 / National Statistics Office

Position : **Project Consultant/Statistician**
Project / Location : Philippines
Project Title : **Use of Time Series Analysis as an Alternative Methodology for Estimating Value of Missing Data in the MISSI and PSS**
Tasks : Supervised NSO personnel in developing imputation procedures to ensure timeliness of estimates from its surveys, MISSI and PSS. The procedures used are based on forecasting models.

Date / Employer : Mar. 2007 – Dec. 2008 / UP Statistical Center Research Foundation Inc.
Position : **Team Leader/Statistician**

Project / Location : Region 1, Region 8, Region 9, Region 11, Region 12, MIMAROPA, NCR, CAR, Philippines
Project Title : **Assessment of the Health Information System and the Development of a National Health Information System Strategic Plan**
Tasks : Supervised the activities of the project; led in the construction of the data collection methodology for the assessment which includes a survey of selected informants in Regions 1, 8, 9 11, 12, MIMAROPA, NCR, CAR; heads the preparation of the reports; coordinates with the Philippine Health Information Network in the conduct of the project

Date / Employer : June 2007 – March 2008/Center for Economic Policy Research
Position : **Statistician**
Project / Location : Nationwide, Philippines
Project Title : **Completion of the Baseline Survey for the DOH Women’s Health and Safe Motherhood Project Phase 2**
Tasks : Constructed the sampling design for the facilities-based survey component of the baseline; assisted in the evaluation and revision of the questionnaire developed by former consultants; conducted trainings of field interviewers in Sorsogon, Western Samar, Surigao del Sur; participated in the identification of indicators for the baseline assessment; constructed the methodology for the composite indicators; shall conduct spot-checks of the field operations; shall supervise the computation of the indicators; shall head the assessment of statistical reports to be generated by the automated system for the baseline data reporting.
Sample size for the survey is 1,200. Analyses included – summary statistics

Date / Employer : November 2007 – October 2008 / National Statistical Coordination Board
Position : **Project Consultant**
Project / Location : Nationwide, Philippines
Project Title : **Development of a Methodology and Estimation of Gender Development Index (GDI) at the Local Level**
Tasks : Supervised the development of a Gender Development Index in the provincial level for all provinces and in the municipal level for selected provinces – Guimaras, Palawan, and Ilocos Norte.

Date / Employer : March 2006 – July 2006 / USAID
Position : **Econometrician/Statistician**
Project Location : Nationwide, Philippines
Project Title : **Technical Assessment of Saving Patterns and Behavior for the EMERGE USAID**
Tasks : Did profile analysis of saving behavior of Filipino households and identified significant determinants of saving using FIES from 1985 to 2003.

Date / Employer : June 2006 – September 2006 / GTZ
Position : **Team Leader/Statistician**
Project / Location : Leyte, and Southern Leyte, Philippines
Project Title : **Client Satisfaction Study for the Environment and Rural Development Program of GTZ in Leyte and Southern Leyte**
Tasks : Developed the survey design for a client satisfaction survey. The design included the questionnaires, the FGD guides, the sampling design, and

plans for analysis; supervised the survey operations, data processing and analysis.

Date / Employer : April 2006 – June 2006 / JICA -TESDA
Position : **Team Leader/Statistician**
Project / Location : Nationwide, Philippines
Project Title : **JICA –TESDA Tracer Study**
Tasks : Constructed the Research Design and the Survey Design, supervised the construction of the questionnaire, supervised the data collection through mailed questionnaires, supervised the editing and encoding of data from the survey, designed the plans for analysis, conducted the focus group discussion (FGD), wrote the analysis and the final report.

Date / Employer : August 2005 – June 2006 / SAGRIC
Position : **Team Leader/Research Design Specialist/Statistician**
Project / Location : Nationwide, Philippines
Project Title : **World Bank – National Survey on Users’ Experience and Perception on the Judiciary**
Tasks : Constructed the Survey Design and the design of the focus group discussions, supervised the construction of the questionnaire, supervised the data collection through the area team leaders in Leyte and Southern Leyte, supervised the editing and encoding of data from the survey, designed the plans for analysis, headed the writing of the analysis and the final report.

Date / Employer : September 2005 / UNDP-NAPC-SEARCA
Position : **Technical Coordinator**
Project / Location : SEARCA, UPLB
Project Title : **UNDP-NAPC-SEARCA Training in Enhancing the Capacity of Government and CSOs in Assessing Development Projects’ Impacts on Poverty Toward Effective Policy Making and Good Governance**
Tasks : Developed the course and the manual, supervised the training sessions

Date / Employer : 2004 / Philippine Institute of Pure and Applied Chemistry
Position : **Statistician**
Project / Location : Philippines
Project Title : **Pilot Proficiency Testing of Drug Testing Screening Laboratories**
Tasks : Developed the sampling for the pilot survey and the estimation method.

Date / Employer : August 2003 – September 2004 / CHED
Position : **Consultant**
Project / Location : Philippines
Project Title : **CHED Scholar-Graduates Tracer Study**
Tasks : Constructed the Research Design and the Survey Design, supervised the construction of the questionnaire, supervised the data collection through mailed questionnaires, supervised the editing and encoding of data from the survey, designed the plans for analysis, wrote the analysis and the final report.
Sample size for the survey is around 400. Analyses included – summary statistics and statistical tables and charts to get the profiles of scholar-graduates.

Date / Employer : July 2003 – December 2003
Position : **Statistician**
Project / Location : Cordillera Autonomous Region, Region 5, and Region 6
Project Title : **Baseline Survey for the Impact Evaluation of the KALAHI-CIDSS**
Tasks : Evaluated the survey design, collaborated in the construction of the questionnaire, constructed the sampling protocol, assisted in the pre-testing of the questionnaire in CAR, conducted the training of interviewers in Region 6, assisted in the spot checks of the survey in Region 5, Constructed the estimation procedure
Sample size for the survey is around 2000. Analyses included – summary statistics and statistical tables and charts to get the profiles for the study areas. Tests of differences of means/proportions were done to compare the pilot and control areas.

Date / Employer : June 2001 – September 2002 / DOST-SEI
Position : **Project Leader**
Project / Location : Philippines
Project Title : **DOST-SEI Scholar-Graduates Tracer Study**
Tasks : Constructed the Research Design and the Survey Design, supervised the construction of the questionnaire, supervised the data collection through mailed questionnaires, supervised the editing and encoding of data from the survey, designed the plans for analysis, wrote the analysis and the final report.
Sample size for the survey is approximately 600. Analyses included – summary statistics and statistical tables and charts to get the profiles of scholar-graduates.