Build more reliable models with PASW Bootstrapping

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Commonly Asked Questions

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Agenda

- Company Overview
- What is Bootstrapping
- Why Bootstrapping?
- Who uses Bootstrapping?
- PASW Bootstrapping
- Products and Procedures for Bootstrapping
- Demonstration
- Q&A
- Contact Information

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More Customers In More Industries

- SPSS has the most customers
  - 250,000 customers
  - Over 95% of the Fortune 1000
- In Every Industry
  - 10 of the top 10 global commercial banks
  - 8 of the top 10 telecommunication services companies
  - 21 of the top 25 retailers worldwide
  - 24 of the top 25 market research firms
- And Throughout the Public Sector
  - All major national governments
  - Every branch of the U.S. Military
  - Every U.S. State Government
  - #1 statistical software on university campuses

What is Bootstrapping?

- Bootstrapping is used for estimating the sampling distribution of an estimator by resampling with replacement from the original sample.
- Derives estimates of standard errors and confidence intervals
- Sampling within a Sample

Why use Bootstrapping?

- Reduce the impact of outliers and anomalies that can degrade the accuracy or applicability of your analysis.
- Clearer view of your data for creating the model you are working with.
- Allows users to analyze data in situations in which data are non-normal. (common in survey and market research).
- Allows the data you have to be self sufficient by getting more samples from less data.
- Create more reliable models

Who uses Bootstrapping?

- Academic researchers, who know this will improve the stability of their models
- Public sector researchers and policymakers, who may need to make inferences from a limited dataset
- Commercial organizations, who may need to make significant investments based on limited data
- Healthcare researchers use it when datasets for clinical trials are small, self-selected, or do not conform to the assumptions of the analysis

PASW Bootstrapping

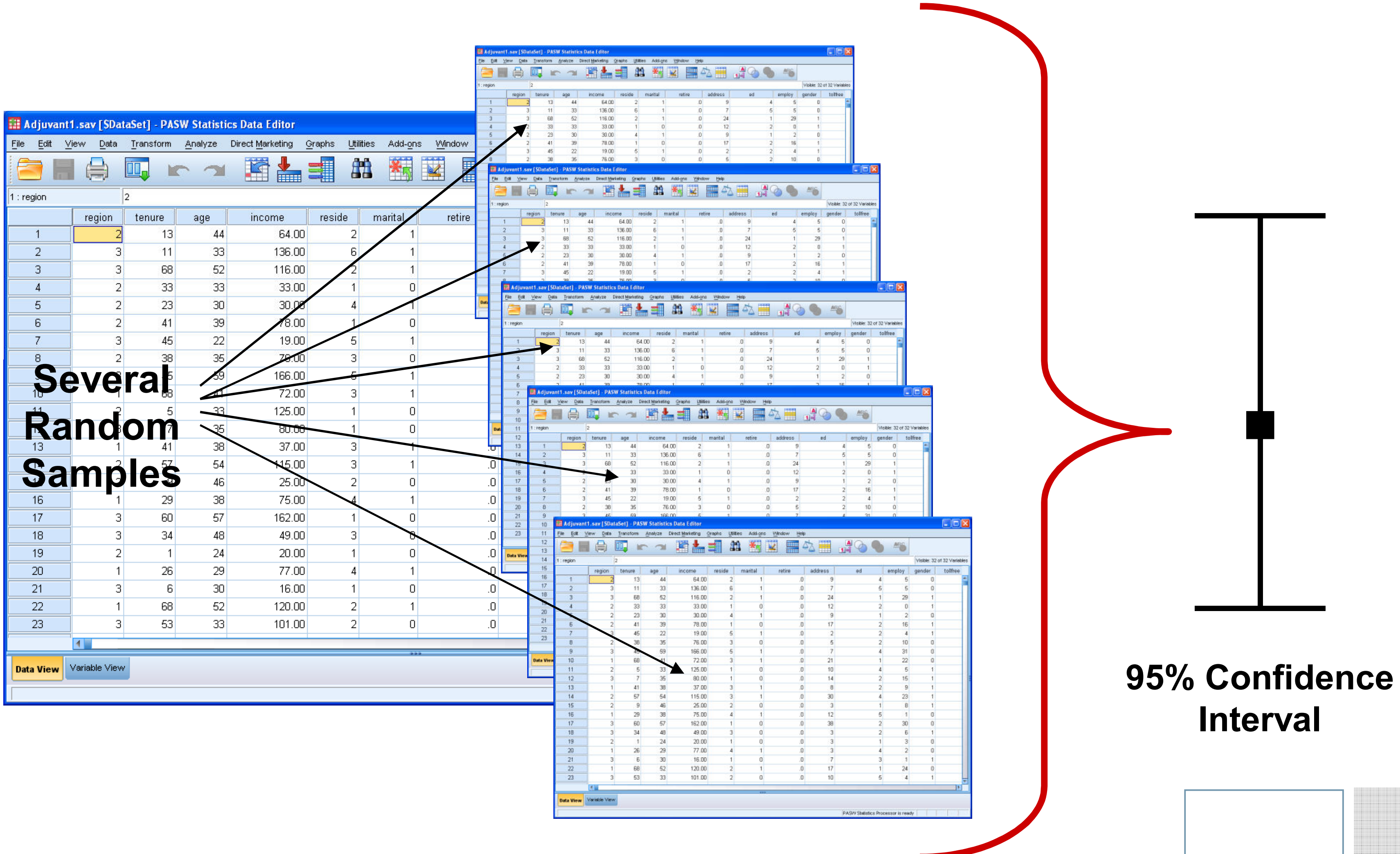
- New Module for PASW Statistics v18
- Ability to Bootstrapping a number of procedures found in PASW Statistics
- Complements PASW Statistics Base, PASW Advanced Statistics, and PASW Regression

Bootstrapping Procedures

PASW Statistics Base	PASW Advanced Statistics	PASW Regression
Frequencies Descriptives Crosstabs Means One-Sample T Test Independent-Samples T Test Paired-Samples T Test One-Way ANOVA GLM Univariate Bivariate Correlations Partial Correlations Linear Regression Ordinal Regression Discriminant Analysis	GLM Multivariate Linear Mixed Models Generalized Linear Models and Generalized Estimating Equations Cox Regression	Binary Logistic Regression Multinomial Logistic Regression

Demonstration

Bootstrapping – The General Idea



Questions?

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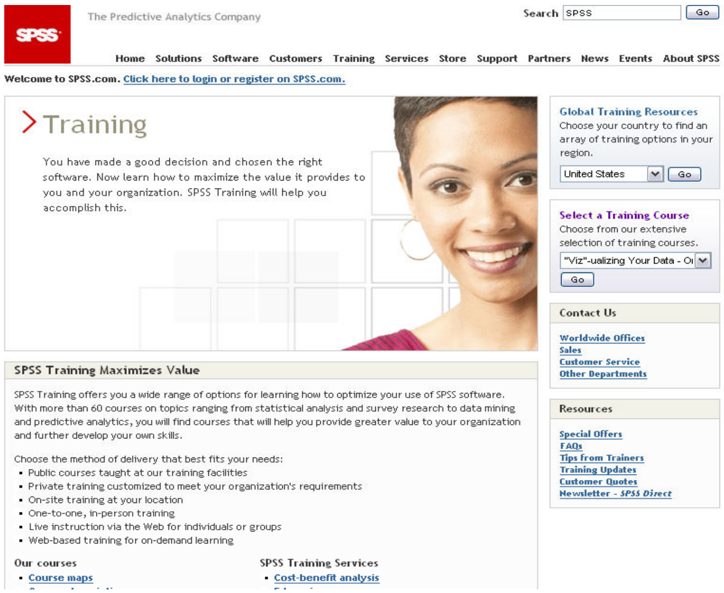

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