

# New Parameter Reduction Methods

## *Simple Estimators of Coefficients of Interest in OLS Regression*

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### Introduction

In least-squares regression models, often an investigator wishes to focus on one or a few parameters out of the full set of regression coefficients. Omitting variables may bias the estimate of the parameter of interest, while including too many regressors leads to efficiency loss. Investigators may often select variables on an a priori basis, which may exclude important regressors, or use other modeling procedures which apply penalties to the regressors [4] in order to shrink and select regressors. A new method [2] may be employed which defines a small number of regressors of interest, computes