Models for the correction of input-output forecasts: experiments with Sri Lankan input-output data

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In recent times, there has been a proliferation of studies on national economies as also the world economy, for future global trends in economic variables such as output of various commodities, environmental variables including GHG emissions and so on, especially in the light of the recently declared Millennium Development Goals. For this purpose, researchers have applied various methods such as Input-Output models, Macro-Econometric models, CGE models and their like. In particular, Input-Output modeling has been used earlier too, for the purpose of forecasting Sector level outputs. The method of forecasting sector level outputs by using Input-Output Tables in conjunction with Macro-Econometric Models can give rise to errors on account of final demand, changes in input-output coefficients or a mixture of both. However, the literature on error correction for changes in the input-output coefficients is not very large. The current paper addresses the issue of errors arising out of Input-Output forecasts. Various methods to estimate such errors have been developed and formalized in this paper. An attempt has been made to calculate the projection errors for various sectors of the developing economy of Srilanka, by using the Input-Output Tables of 1986, 1994 and 2000. Results show that the size of the errors varies according to the methods adopted. The estimates of forecasting errors have been used to make corrections for the sector level output forecasts for Srilanka for the year 2010 and 2015.