The present thesis deals with multiple econometric equations systems which might provide a useful insight into the national economy modelling. It takes into account possible pitfalls of common practices. It introduces the theory and estimation methods of multiple econometric equations systems. It also discusses the equality of savings and investment and the theory of money. Furthermore, it briefly analyses Klein's model I from a theoretical point of view and uses the three-step least squares method in order to estimate it. Partial modifications of this model are suggested and implemented. The quality of the competitive models is evaluated employing the predictive criterion. Consequently, the canonical NK DSGE model is derived and subjected to theoretical criticism. The thesis debates doubts on the relevance of the NK IS curve and argues that Lucas's critique is still valid. A generalized method of moments is used to implement the NK DSGE model. Finally, this model is briefly compared with Klein's model I.