Understanding and Forecasting Macroeconomic Dynamics of Argentina: An Input-Output Stock-Flow Consistent model

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This paper presents an empirical model of the Argentinean economy that can be used for both explanatory and forecasting purposes. Whereas the state-of-the-art macroeconometric modelling is grounded on an instrumental approach that neglects the structural features of the economy, we propose a more realistic model that takes up the tradition of the Cowles Commission. The model aims at combining input-output analysis with the comprehensive description of the macroeconomic system embedded in stock-flow consistent models, where all stocks and flows are fully integrated into a transaction matrix that ensures no black holes in the accounting. The theoretical foundations of the model are built upon the Post Keynesian and Latin American Structuralist schools of thought. The model combines an input-output matrix with a "handmade― social accounting and flow of funds matrix. Since the institute of statistics of Argentina publishes neither a social accounting matrix nor a flow of funds matrix one of the challenges of our work is to make an approximation to these key components of every stock-flow consistent model. Once the official input-output matrix is merged with our approximations of the social accounting and flow of funds matrices we derive a system of equations that represents the dynamic behaviour of the model. Accounting identities are directly derived from the transaction matrix. Behavioural equations are estimated econometrically using modern techniques. In order to produce short and medium term forecasts the model is specified in a quarterly basis. The structure of the model is such that several key macroeconomic and sectoral variables (GDP, inflation, current account, budget balance, sectoral output and employment, etc.) can be forecasted simultaneously in a general equilibrium framework that acknowledges the holistic nature of the economic system.