Money Stock = Total Debts - New Theory of Money

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Abstract:
(1) We have been developing ASD Macroeconomic Model of Japan that integrates GDP accounts and the Flow of Funds Account (FFA) published by the Government and Bank of Japan, respectively. Visualization of FFA plays an essential role for this model construction. FFA is a collection of time-series data on financial transactions (flows) and stocks, consisting of 51 rows (transactions) and 45 columns (sectors), totaling 2,295 cells in the FFA matrix. Accordingly, annual data between 1980 - 2017 includes a total of 87,210 data points. With quarterly series it contains 348,840 data. Using ASD modeling method, we have imported all data successfully into a model, allowing for instantaneous consultation and empirical analyses in more efficient way. (2) Building upon the FFA visualization model, we have newly found the following monetary behaviors of Japanese economy with high correlations: (i) Money Stock (M2/M3) equals Total Domestic Debts (ii) Time Deposits equals Debts of Private Sectors (producers and households) (iii) Money Stock (M1) equals Government’s Debts These empirical results render the conventional macroeconomic theory questionable; that is, savings leaked from money circulation become sources of investment. Conversely, we claim that investment is made by bank loans first, which then ends up in savings accounts later. We show this economic logic by System Dynamics diagram. (3) Above results are part of our recent research on money creation under both debt money and public money systems. Their research position is presented by our newly organized classification of money.

Keywords: Accounting System Dynamics (ASD), Macroeconomic Model, Flow of Funds, Money Stock, Government Debts,

JEL Codes: E51, E42