

"Household Demand for Money in Poland:
Theory and Evidence" by Timothy D. Lane

This paper examines the household demand for money in Poland during the 1980s. At that time, although Polish households were faced with shortages in the official shops, their holdings of foreign currency were substantial, and informal trade was widespread in goods and foreign exchange.

The paper first presents a theoretical model of a representative household's holdings of domestic and foreign money in a socialist economy, using a variant of the cash-in-advance framework. The household needs domestic currency to buy goods in the official shops--where supplies are limited and uncertain--but can use either domestic or foreign money in the black market--where prices are expected to be higher. Changes in the black market exchange rate affect both the return on foreign money relative to domestic money and households' wealth; expectations of, and uncertainty about, exchange rate movements, as well as inflation, therefore influence households' portfolio choice between the two moneys.

The paper presents estimates for household data from December 1979 to October 1988, using the two-stage error-correction framework. It estimates first a static money-demand equation and then a dynamic equation for the change in money balances. As implied by the theoretical model, expectations of inflation and the appreciation of the black market exchange rate, as well as their expected variances and covariance, are included as explanatory variables. Under the assumption of rational expectations, the realized values of these variables are included, and an instrumental variables procedure is used to deal with the resulting errors-in-variables and endogeneity problems. The results show that an error-correction equation can be specified in which changes in household income, the price level, and the black market exchange rate play significant roles; they do not show any significant effects of the expected changes in inflation or in the rate of exchange rate appreciation (possibly because these are difficult to predict from their past values). Changes in the variance of the rate of exchange rate appreciation and in its covariance with inflation do, however, have a significant effect on money demand.

The stability of the estimated money-demand equation is narrowly rejected at two points: when martial law was imposed in December 1981 and when reforms--including large price increases--were intensified during the Second Stage of Reform in late 1987. This finding is consistent with the theoretical model, though, since such regime changes may be associated with changes in the relationship between official and black market prices and with other changes in the type of shock impinging on households.

These results are evidence against the traditional view of money in socialist economies, according to which money holdings are largely passive. They suggest, rather, that it is fruitful to use a choice-theoretic framework in analyzing the demand for money in a socialist economy.