HOW WELL DOES THE IS-LM MODEL FIT POSTWAR U.S. DATA?
Jordi Galí (1992) - The Quarterly Journal of Economics

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Outline

1. Summarize
   - Context
   - Objective
   - Strategy
   - Empirical tool
   - Results

2. Discussion
   - Assumptions
   - Money Supply
   - Financial markets
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Discussion Gali(1992) - QJE
The IS-LM-Phillips curve model has been commonly used to evaluate, among others, alternative economic policies and for purposes of economic forecasting. However, the model has been criticized for the next reasons:

- lack of microeconomic foundations. Especially on the supply side.
- arbitrariness of its assumptions on the nature of expectations.
- unsuitability of the models for the purpose of policy evaluation.
- strong restrictions assumed for econometric identification.
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Despite of a general consensus in accepting these critics, there are two different research programs:

- **New Classics**: Rejects the Keynesian paradigm and is based on neoclassical economic theory. Uses market clearing and perfect competition principles.

- **New Keynesians**: Under market imperfections, Keynesian models might explain fluctuations in the short run that neoclassical models cannot.
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“...to reevaluate, with the aid of time series methods, the empirical validity of the IS-LM-Phillips curve model, the central paradigm of Keynesian economics.”
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Galí highlights the next three predictions of the IS-LM-Phillips curve model:

a. “Aggregate demand shocks have (at least) short run effects on GNP and other real variables as a result of slow adjustment of nominal variables.

b. Monetary shocks are transmitted to the real sector through changes in real interest rates.

c. GNP and prices move in the same direction in response to an aggregate demand shock, but in opposite direction in response to an aggregate supply shock.”
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The paper models jointly the behavior of postwar U.S. time series for money, interest rates, prices, and GNP.

The four disturbances described in the IS-LM-Phillips curve model are identified as the main sources of fluctuation in the studied series:

- Money supply shocks.
- Money demand shocks.
- IS shocks.
- Aggregate supply shocks.

The response of the economy under the estimated model is compared with the theoretical response predicted by the IS-LM-Phillips curve model.
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Slow price adjustment is observed, as well as a strong and persistent effect of Aggregate Demand shocks.

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Assume we are a central bank and we want to evaluate the impacts of a monetary policy.

Can we use this approach to assess such effects?
The model can be implemented and is useful to predict effects.

In fact this model has been implemented for several countries.

However, it is important to discuss some of the limitations of the model and its implementation:

- Assumptions in Galí (1992) used to identify the model. In real world, the central bank does not control completely the monetary supply as is assumed in the model.
- The absence of more complex financial market into the IS-LM.
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Figure: Monetary multiplier for the period 1959 - 1989. Calculated by using the monetary aggregate M1 and the monetary base.
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When considering more complex financial markets, the effects of the monetary policy are predicted with much less accuracy.

Example: Swaps, forwards, options. In particular, if firms can use derivative products in order to manage interest rate risk, the monetary transmission mechanism of monetary policy might change.
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