

Causality Between Money and Price Level in India Revisited

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While using Sims' Methodology we found (in an earlier paper) our conclusion about causality between money and price level to be somewhat ambiguous.

In this paper we have re-examined this issue while using only Granger test. We have found that there exists a unidirectional causality running from M_1 to P (money narrowly defined and price level) on the one hand and from M_3 to P on the other (money broadly defined and price level).

Sharma (1985), while using Sims' Methodology 1/ to test causality between Money and Price level in India, concluded that : (i) for the sample period 1962-80 the causality from M_1 to P was much stronger than the reverse causality from P to M_1 and (ii) bi-directional causality existed between M_3 and P.

In the present paper, we have re-examined the issue of causality between Money and Price level in India and have used only Granger's test for this purpose. We have found that there exists a uni-directional causality running from M_1 to P on the one hand and from M_3 to P on the other. These results are at sharp variance from those reported Sharma (1985) earlier.

The sample period used in this study is from 1954 to 1985. There is nothing specific about the year 1954 as the beginning point. It could have been 1951 as well. But since some observations were lost in the process of deseasonalizing and second differencing we preferred to work from 1954 and onwards. We hope, choosing 1951 or 1954 does not affect our conclusions.

Both annual as well as quarterly data have been used for estimation of the parameters of regression equations. But the annual data did not provide us with conclusive results because of limited degrees of freedom. We therefore, concentrated more on the quarterly data.

Granger's method of testing causality 2/ was originally proposed in terms of cross-spectrum analysis but Sims' transformed the test to the conventional regression analysis. 3/ So the Granger's test can be expressed as :

(i) M causes P if predictions of P based on all past information (including M) are better than those based on all past information excluding M.

(ii) Similarly P causes M if predictions of M based on all past information (including M) are better than those based on all past information excluding P.