

Comments

The study uses Autoregressive Distributed Lag (ARDL) approach to cointegration for exploring long-run and short-run relationship and dynamics of inflation and output in Pakistan. This approach was introduced by Pesaran and Shin (1999) and further developed by Pesaran et al. (2001). This approach has a number of advantages over conventional Johansen cointegration technique. It avoids pre-testing problem associated with standard cointegration which makes it easy to use. The variables do not have to be integrated of the same order [either I(1) or I(0)]. Another advantage of this approach is that it provides robust results in small sample sizes while the Johansen cointegration technique still requires large data samples for validity purposes. Further a dynamic error correction model (ECM) can be derived from ARDL that integrates the short-run dynamics with the long-run equilibrium without losing long-run information.

The inflation model consists of money supply (M2), output (Real GDP), import price variable (unit price of imports) and inflation (GDP deflator). The output model includes money supply, real GDP and GDP deflator. The results of the inflation model suggest that money is not the main determinant of inflation in Pakistan; instead it is determined by the unit value of imports. On the other hand, the results from the output model suggest that money is a strong determinant of output in Pakistan. Based on the above, the authors suggest that State Bank of Pakistan should not adopt inflation targeting because doing so would cause severe recession.

The authors believe that strong functional form of quantity theory of money does not exist because it is incorrect empirically. Therefore, they assume the weak form of quantity theory of money which also helps them to justify their results. While discussing the impact of changes in the quantity equation the paper says:

“Thus, in weak functional form, with output (Y) held constant, price level (P) tends to increase as money supply (M) increases, with M held constant, P tends to decrease as Y decreases; and with P constant Y tends to increase as M increases”.

The first statement that output held constant, price level tends to increase as money supply increases – sounds fine. However, statement two and three strongly contradicts the quantity theory of money in any form.

To explain the long-run behavior of the price level in Pakistan the paper uses unit price of imports (F), however, it does not specifically mention the variable used for unit price of imports. The proxy representing unit value of imports should be

relevant to Pakistan. In addition, results would be sensitive to using different measures of price of imported goods.

The specified models are missing important variables such as credit to private sector, government bank borrowings, interest rates, exchange rates, wheat prices and lag of price level for capturing inflationary expectations. These variables are considered to have a significant impact on price level in Pakistan, both in terms of its historical and recent inflation experience. Moreover, the paper does not provide estimates based on headline inflation, i.e. CPI. Although it is believed that there is close correlation among the various price indices, these indices could differ by several percentage points from year-to-year. Therefore the choice of price index could have serious bearing on the conclusions regarding the causes of inflation.

It is surprising to see that the study uses only nominal variables, i.e. money supply (M2) and price level (GDP Deflator) as determinants of output in Pakistan. The study is based on annual data which does not capture the short-run dynamics of the ECM and reduces the usefulness of the models for monetary policy analysis. Despite using a superior methodology the study has come up with very unconventional conclusions suggesting that State Bank of Pakistan should not adopt either explicit or implicit inflation targets.

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References

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