

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: The International Transmission of Inflation

Volume Author/Editor: Michael R. Darby, James R. Lothian and Arthur E. Gandolfi, Anna J. Schwartz, Alan C. Stockman

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-13641-8

Volume URL: <http://www.nber.org/books/darb83-1>

Publication Date: 1983

Chapter Title: IV. International Price Movements

Chapter Author: Michael R. Darby, James R. Lothian, Arthur E. Gandolfi, Anna J. Schwartz, Alan C. Stockman

Chapter URL: <http://www.nber.org/chapters/c6136>

Chapter pages in book: (p. 419 - 420)

# IV International Price Movements

What was the cause or causes of the international burst of inflation in the early 1970s? In this part we address that question directly. A number of suspects are popular in the literature: American money growth, international reserve growth, oil price increases, other commodity price increases, and increased union greed. The latter is supposed to be validated by accommodative monetary policy and was shown to be inconsistent with the data in chapter 4 above. So this part attempts to sort the remaining factors into categories of dominant cause, supporting cause, and symptom of the world inflation. We find that American money growth was the dominant factor with oil price increases playing at most a supporting role in the evolution of international inflationary trends. International reserve growth and other commodity price increases are symptoms of the inflation and its international transmission.

Gandolfi and Lothian derive a reduced-form price equation from a Lucas-aggregate supply function and a standard money demand equation. They then test whether international factors enter this equation directly via shifting the aggregate supply function or only indirectly via rational expectations of money growth. The four international factors tested (the real price of oil, a world commodity price index, the American price deflator, and a rest-of-world price index) were generally insignificant except that the

price of oil is statistically significant in nearly half of the cases. Even taking the point estimates at face value, oil price changes were estimated to account for only about 15% of total inflation even in 1973–74. The dominant factor determining inflation in each country was the evolution of the domestic money supply.

The evidence in parts II and III strongly indicates that purchasing-power parity is not a rigid condition established by goods arbitrage. In chapter 15, Darby shows that even though substantial shifts in the level of the purchasing-power ratio may occur and cumulate over time, the purchasing-power-parity approach may still be useful in explaining international trends: Almost any reasonable level effects will average out sufficiently over a number of years so that the average inflation rates are approximately harmonized.

In the concluding chapter of this part, Darby demonstrates that the United States would be the exogenous source of world inflation under pegged exchange rates if two conditions are met: if U.S. nominal-money-supply and real-money-demand growth trends are independent of foreign influences. Neither gold flows nor the balance of payments (or any other foreign variable) was found to enter significantly in the American money supply reaction function, so the first condition is met. Although there is considerable variation in real-money-demand growth in the short run from nonmonetary sources (both domestic and foreign), these effects are largely self-reversing so that there is essentially no effect on average growth over periods of four years or more.

Accelerated American money growth was thus the dominant and independent cause of the world inflation of the early 1970s. Unfortunately, it remains for future research to explain why American money growth goals accelerated gently throughout the period 1957–76: An important trend factor in the U.S. reaction function only labels this refractory area of ignorance.