

# Comments

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The aim of Kuszczak and Murray's chapter is to explore the economic interdependence among major industrialized countries. To this end, they apply vector autoregressive analysis to key macroeconomic variables for the United States, Canada, and a country called Rest of World (ROW), comprising Canada, France, the Federal Republic of Germany, Italy, Japan, and the United Kingdom. For each of these three countries Kuszczak and Murray consider four endogenous variables: output, the price level, the money stock, and interest rates. Furthermore, they take account of the exchange rates between the U.S. and the Canadian dollar, on the one hand, and between the U.S. dollar and the ROW currency on the other. Following the VAR approach, they regress each endogenous variable on a constant term, its own lagged values, the lagged values of the other domestic endogenous variables, as well as the lagged values of the foreign endogenous variables. These regression equations are in turn used to estimate the relative importance of domestic and foreign shocks as sources of variation in the endogenous variables.

The most important conclusion of Kuszczak and Murray's chapter is that in all three economies domestic variables are highly sensitive to foreign shocks. Not surprisingly, the Canadian economy seems to be much more open than its U.S. and ROW counterparts. Moreover, the shift from a fixed exchange rates system to a floating system does not appear to have loosened the links among the three economies. Thus, Kuszczak and Murray cast doubt on the widely held view that floating exchange rates have enhanced a country's ability to insulate its economy from foreign shocks.

Although these conclusions, for the most part, seem plausible, I find it difficult to comment on Kuszczak and Murray's chapter for two reasons. First, I do not feel qualified to review its theoretical aspects because of my limited knowledge of VAR analysis. Second, estimates obtained from VAR models do not lend themselves to easy interpretation. VAR models impose a minimum of a priori restrictions on the specification and coefficients of the regression equations. The absence of priors would clearly be an advantage if

standard structural macroeconomic models did not adequately capture economic interdependence and, therefore, failed to uncover important links between domestic and foreign variables. In this event, VAR analysis might provide some guidance as to how the explanatory power of standard structural models might be improved. However, if based solely on VAR models, an analysis of economic interdependence may well generate misleading results. Unlike structural models, the VAR approach does not offer means of discriminating between spurious and economically significant results. Moreover, if not spurious, the results are frequently consistent with a multitude of structural models. Thus, while VAR models may show *that* two variables are related, they often fail to explain *why* they are related. Let me illustrate these difficulties with two examples drawn from Kuszczak and Murray's chapter.

### Canadian Perspective vs. Swiss Perspective

As regards the difference between fixed and floating exchange rates, Kuszczak and Murray's conclusions are colored by Canadian experience. Their results suggest that the Canadian economy was dominated by U.S. variables under both fixed and floating exchange rates. They attribute the close correlation between Canadian and U.S. macrovariables to the similarities of Canadian and U.S. monetary policies, as well as the strong structural relationships between the two countries. Although I admit that the evidence does not point to floating exchange rates acting as a wedge between the Canadian and U.S. economies, I do not believe that Canadian experience may readily be generalized. Kuszczak and Murray's analysis of ROW—which appears to confirm the Canadian results—is not entirely convincing. In my opinion, it is dangerous to draw conclusions from a study of the economic links between the United States and a composite of industrialized countries. The experiences of Japan and Western European countries have been sufficiently diverse to warrant case-by-case consideration. In this context, it is interesting to compare the Kuszczak and Murray chapter with similar research conducted by Genberg and Swoboda for Switzerland.<sup>1</sup> Switzerland, of course, is not part of ROW, as defined by Kuszczak and Murray, but I suspect that most of Genberg and Swoboda's conclusions would also be valid for the Federal Republic of Germany.

Applying VAR analysis to the relationship between Swiss and foreign macroeconomic variables, Genberg and Swoboda find that the sensitivity of Swiss variables to foreign output increased, rather than decreased, after the shift to a floating exchange rate. However, floating exchange rates lessened substantially the dependence of the domestic price level and domestic interest rates on foreign shocks. Thus, they strengthened considerably the ability of

the Swiss National Bank—Switzerland's central bank—to influence domestic prices and interest rates. This is comforting knowledge for a central bank that regards price stability as the ultimate objective of monetary policy and does not place much confidence in its ability to manage domestic output either under closed- or open-economy conditions. In light of the Swiss experience, I would maintain that floating exchange rates—despite their shortcomings—have extended the freedom of action of monetary authorities.

### Sensitivity to Foreign Shocks

An interesting result reported in the Kuszczak and Murray chapter is the strong sensitivity of the Canadian money stock to changes in U.S. interest rates. They point out that this relationship may reflect currency substitution on the demand side of the money market or such supply-side effects as a strong response of Canadian monetary authorities to movements in U.S. interest rates. As Kuszczak and Murray themselves admit, due to the astruc-tural nature of VAR analysis, they are unable to identify the causes of the observed relationship between the Canadian money stock and U.S. interest rates. Similar problems arise in interpreting the statistically significant link between the U.S. money stock and the exchange rate, as well as the inverse relationship between the ROW money stock and U.S. prices.

From the standpoint of central banks, it is not particularly useful to know that the domestic money stock is sensitive to foreign shocks. What really interests central bankers is the question of whether economic inter-dependence impairs their ability to achieve such domestic objectives of monetary policy as stable prices and steady economic growth. This question can only be answered by a structural model that allows one to determine the causes of the observed links between the domestic money stock and foreign variables.

Although it is difficult to draw policy conclusions from their chapter, Kuszczak and Murray explore the implications of their results for Canadian monetary policy. In interpreting the strong sensitivity of the Canadian economy to U.S. variables, they play down possible external constraints on Canadian monetary policy, but stress instead shared policy objectives of U.S. and Canadian monetary authorities. Needless to say, since Kuszczak and Murray do not explain the high sensitivity of the Canadian economy to foreign shocks, their emphasis on shared policy objectives may or may not conform to the empirical evidence. Swiss experience certainly suggests that external constraints on monetary policy complicate the central bank's task of achieving its ultimate policy objectives.

Although I had some difficulty in interpreting Kuszczak and Murray's

results, I enjoyed reading their chapter. I hope that their competent and interesting work will stimulate further research on economic interdependence, an issue that greatly concerns central banks.

## Note

1. Hans Genberg and Alexander K. Swoboda. *External Influences on the Swiss Economy under Fixed and Flexible Exchange Rates*. Diessenhofen: Verlag Rügger (forthcoming).