An Empirical Analysis of the Output Declines in Three Eastern European Countries

EDUARDO BORENSZTEIN, DIMITRI G. DEMEKAS and JONATHAN D. OSTRY*

The declines in economic activity experienced by Bulgaria, the Czech and Slovak Federal Republic, and Romania in the period since market-oriented reforms were initiated are analyzed. After reviewing developments in these three countries, the paper empirically investigates two questions that are central to an interpretation of the output decline. First, to what extent does the output fall reflect “structural change,” or a reallocation of resources across sectors, rather than a conventional macroeconomic recession? Second, to what extent have demand-side or supply-side forces been dominant in generating the output decline? [JEL E2, O5, P5]

IN THE TWO-YEAR PERIOD since the Eastern European countries implemented market-oriented economic reform, measured output in the region has declined sharply. Some have argued that the magnitude of the decline (more than 20 percent for the region as a whole) has been

*Eduardo Borensztein, a Senior Economist in the Research Department, holds a doctorate from the Massachusetts Institute of Technology.

Dimitri G. Demekas is an Economist in the European I Department. He received his Ph.D. from Columbia University.

Jonathan D. Ostry, an Economist in the Research Department, holds a doctorate from the University of Chicago, as well as degrees from the London School of Economics and Political Science, Oxford University, and Queen’s University.

The authors wish to acknowledge the assistance of Fund colleagues working on Eastern Europe as well as the helpful comments and suggestions of John Huizinga, Malcolm Knight, Carmen Reinhart, Alan Stockman, Rachel van Elkan, Peter Wickham, and participants in the conference, “The Macroeconomic Situation in Eastern Europe,” hosted by the IMF and the World Bank in Washington, D.C., June 4–5, 1992.
overstated by official statistics, either because their coverage excludes all or part of the growing private sector (Berg and Sachs (1991)) or simply because, beginning from an initial situation in which prices are controlled, standard index numbers will generally overstate the extent of the output decline once prices are freed (Osband (1992)). Such explanations do not claim, however, that the output decline is entirely an artifact of official statistics.

The purpose of this paper is to offer some tentative explanation for this output decline by focusing on the experience of three countries—Bulgaria, the Czech and Slovak Federal Republic (CSFR), and Romania—since they initiated reform. The focus on this particular set of countries (hereafter referred to as BCR) is motivated by the fact that they were perhaps the most rigidly centralized economies in the region. While other countries, notably Hungary and Poland, experimented with enterprise autonomy, limited price liberalization, and private ownership before the beginning of large-scale reform, the three BCR countries remained wedded to rigid central planning more or less until the end. The three countries differed significantly, however, in their degree of adherence to financial discipline during the years of central planning. At one extreme was the CSFR, with low foreign debt and relatively few shortages. At the other was Bulgaria with high foreign debt and significant shortages. In Romania, the economy was able to generate—with considerable hardship—external surpluses sufficient to eliminate its foreign debt, but significant internal imbalances were nonetheless apparent.

Although our analysis of the output declines focuses on the move toward a market economy—defined with reference to the date on which most prices were liberalized—it should be noted that the initiation of market-oriented reforms was not a necessary condition for economic activity to decline, as the experience of the former U.S.S.R. (which began to liberalize much later) clearly shows. Nor is it the case that the cumulative decline in output was largest for countries that started the transition earlier, as the Bulgarian case clearly illustrates. Put differently, output was already falling in much of the region even before reforms were initiated, and it is not obvious what the “counterfactual” to the reforms would look like: that is, how far output would have fallen had markets not been liberalized. To a large extent, the fact that output started to collapse before the reforms was a result of the situation of “neither plan nor market” that emerged after the political changes, a situation in which state enterprises were not tightly controlled but did yet not face appropriate incentives.

The average percentage decline in output in the BCR country group in the two-year period ending in 1991 was a relatively large 23 percent,