Editors' Summary

THE BROOKINGS PANEL ON ECONOMIC ACTIVITY closed its sixth year with a conference held in Washington, D.C., on December 4–5, 1975. Presented at that time and included in this issue are four articles and one report devoted to problems of current importance and concern. Three of these articles continue the panel's analysis of inflation, dealing with corporate-profits accounting under inflation, the behavior of raw-materials prices, and the importance of aggregate demand in price behavior; the fourth explores some current controversies in international economics.

In the first article in this issue, Marina Whitman analyzes and reviews some new theoretical approaches in international economics that challenge the standard analysis of balance-of-payments adjustments. She divides the challengers into two groups: the global monetarists, who would stand the traditional analysis "on its head," and the advocates of the monetary approach, who offer substantial but less drastic changes in it.

In prevailing Keynesian analysis, payments balances are examined largely in terms of the balance of trade. In that view, net exports depend on aggregate demand and on relative prices at home and abroad. A payments deficit can be reduced by holding down domestic income in order to cut the demand for imports and stimulate the supply of exports, or by a currency devaluation that discourages imports and encourages exports by changing relative prices. But the former cure may conflict with domestic objectives for prosperity and full employment, and the latter was, in fact, difficult to accomplish under the Bretton Woods system of fixed rates. Hence, painful conflicts often developed between external and domestic objectives. A shift to an international system of flexible exchange rates offered an escape from

these conflicts and appealed to both Keynesians and monetarists as a way to allow countries to pursue sensible internal policies without undue worry about the balance of payments.

The global monetarists contend, however, that a change in the exchange rate (whether pegged or flexible) affects inflation but not the balance of trade. Moreover, they insist that monetary-policy measures to curb inflation are often doomed to failure because of inflows of funds from abroad. Thus, flexible exchange rates do not perform a useful function in their view of the world; and hence, in sharp disagreement with traditional monetarists and Keynesians alike, the global monetarists favor pegged exchange rates as an efficient way to establish a reliable international money.

These startling conclusions of the global monetarists follow from three basic assumptions. First, they invoke the traditional monetarist tenet that the demand for money is closely and dependably related to the level of income. Second, they posit a "law of one price" that fixes the relative price of any commodity among countries because world commodity markets are closely integrated. Third, reflecting the same view of world integration, they insist that a country cannot fully control its own money supply; any demand for money by its citizens that is not fulfilled out of the domestic component of money will be met by drawing funds in from abroad. Under these assumptions, a devaluation that lowers a pegged exchange rate will, in the short run, raise the domestic price level through the law of one price, thereby increase the demand for money, and thus attract foreign funds. That inflow of funds will indeed reduce the payments deficit, but without any change in the balance of trade. A decline in a flexible exchange rate is a symptom of an excess supply of domestic money that causes an outflow of funds. This redistributes money supplies among countries, without influencing real output, exports, or imports. Finally, according to this view, an expansionary monetary policy generates an outflow of funds without any effects on real economic activity.

The monetary approach to the balance of payments accepts one piece of the global-monetarist package—the proposition that the money supply is not subject to full domestic control. Hence, it views surpluses and deficits in payments primarily as excess demands or supplies of national moneys rather than of goods, and exchange rates as the relative prices of those national currencies. Unlike the traditional Keynesian view, it emphasizes stocks of funds rather than flows of goods. As in global monetarism, both a payments deficit under fixed rates and a weak currency under flexible

rates are seen as symptoms of too much money. But the monetary approach does not accept the rest of the global-monetarist package. Therefore, it permits shifts in relative prices, an effect of the exchange rate on the flow of goods, and hence some degree of independence for domestic monetary policy. Changes in exchange rates can thus have real effects in the short run, as in the Keynesian model. Only in an ultimate long-run equilibrium, with money supplies assumed to be unaffected by the intervening developments in the real economy, will the monetary approach yield the same conclusions that the global monetarists hypothesize for the short run.

In her critique of these views, Whitman finds little to recommend the global-monetarist package. That model leaves unanswered the question of "how a payments disequilibrium can occur in the first place." Empirically, its crucial "law of one price" seems to be broken by many commodity markets for substantial time periods. Its view of world integration goes too far in "essentially denying any relevance to national boundaries." Finally, the long-run tendencies it stresses are neither reliable enough nor quick enough to obviate the challenges to policymakers to deal with short- and medium-run disturbances. Hence, Whitman concludes, the global-monetarist assumptions "by and large, miss the boat for applicability to current problems."

Whitman offers a more favorable verdict on the contribution of the monetary approach. Although she does not agree that national money supplies are uncontrollable by major countries and particularly by the United States, she feels that the monetary approach has yielded fruitful insights, especially for a world of flexible rates. It has rightly focused attention on relative money-market conditions and shifts in portfolio preferences as important determinants of exchange rates, correcting the previous undue preoccupation with trade conditions. As she sees it, the asset-market approach is now being integrated into conventional analysis, producing a better and sounder theory of exchange rates and the balance of payments.

The task of defining an inflation-adjusted measure of corporate profits is tackled by John Shoven and Jeremy Bulow in the second article of this issue. The accounting questions involving depreciable assets and inventories are discussed in detail, while those relating to financial assets and liabilities are deferred to a sequel article to appear in the 1976 volume of *BPEA*.

In standard accounting practice, a dollar is a dollar, and therefore inflation-induced changes in real positions are ignored. Yet, during a period

of inflation, any firm that merely maintains the nominal value of its assets incurs a real loss, while one that maintains the nominal value of its liabilities experiences a real gain.

This problem is acute in depreciation accounting. Depreciation allowances measured in terms of the original cost of plant and equipment may seriously understate the cost of replacing the assets. In principle, the authors would like a replacement-cost measure of depreciation geared to specific price increases for particular capital goods. In practice, however, they regard existing price indexes of capital goods as unreliable; hence, they opt for "general-value depreciation," which marks up original-cost depreciation by the rise in the *general* price level. The general price level is measured by the "domestic spending deflator," a price index that covers gross national product less exports plus imports.

Firms now generally keep two sets of depreciation accounts, both geared to original cost: the one used for internal management guidance and for stockholders' information applies straight-line write-offs, while that prepared for the tax collector takes advantage of legal provisions that permit enlarged deductions in the early years of an asset's life. Until the recent benchmark revisions, released by the Department of Commerce after the preparation of the Shoven-Bulow article, the national income accounts were also geared to the accelerated depreciation permitted by the Internal Revenue Service. The authors show that accelerated original-cost depreciation may exceed straight-line replacement-cost depreciation for many firms even when inflation rates are quite high. But they argue that acceleration is not a satisfactory substitute for inflation accounting, because it makes an adequate correction only for some particular rate of price increase and discriminates in favor of those firms that grow rapidly and have relatively short-lived capital goods.

To appraise the effect of a switch to general-value depreciation, the authors analyze the depreciation allowances of the thirty firms in the Dow Jones industrial average. They estimate that, in 1974, straight-line general-value depreciation for this group would have exceeded "book depreciation" (reported to stockholders) by approximately $4 billion, or 35 percent. But the depreciation reported on tax returns exceeded book depreciation by roughly $2½ billion. Among twenty-seven companies for which such information was available, straight-line general-value depreciation would have exceeded tax depreciation by nearly $1½ billion, or roughly 10 percent, in that year. That switch would have had substantially different im-

pacts among companies, actually reducing tax depreciation for nine of the twenty-seven, and raising it by as much as one-third for several firms.

Shoven and Bulow also compare, for the total nonfinancial corporate sector, tax depreciation in the national income accounts (prior to the benchmark revision) with a straight-line replacement-cost measure. They estimate that, over the entire period from 1950 to 1974, tax depreciation fell short of straight-line replacement-cost (with their preferred estimate of service lives) by only 6 percent. But the pattern over time is very uneven. From 1962 to 1967, tax depreciation actually exceeded straight-line replacement-cost. But with rapid inflation, it was less than straight-line replacement-cost by $10.3 billion in 1974.

In their discussion of inventory accounting, Shoven and Bulow distinguish the adjustments appropriate for two main accounting techniques—FIFO and LIFO. FIFO puts inventory capital gains in income as they accrue, while LIFO counts them only when they are realized, thus excluding inflation-induced gains on inventories except to the extent that firms reduce their stocks. To prevent FIFO inventory accounting from swelling profit measures with inflation gains, the authors suggest deducting from income an adjustment equal to the value of initial inventories multiplied by the percentage change in the domestic spending deflator. And they prefer this "constant-dollar" FIFO method to LIFO.

Applying constant-dollar FIFO uniformly to the Dow Jones industrials in 1974, the authors obtain a small *increase* in the before-tax reported profits of $360 million. Firms that currently use FIFO would report lower incomes. But for 1974, those using LIFO would have reported higher profits, because the price of inventories rose much faster than the domestic spending deflator. The Dow Jones companies are atypical, however, because so many have adopted LIFO. For all nonfinancial corporations in that extremely inflationary year, earnings before tax would have been reduced by $16 billion through constant-dollar FIFO, and by $35 billion through LIFO.

In conclusion, the authors caution that the total impact of inflation on corporate profits can be appraised only when adjustments for financial assets and liabilities (which tend to *raise* profit estimates for nonfinancial corporations) are developed in the sequel paper.

In the third article, Robert J. Gordon, building on his own earlier work with aggregate price equations (*BPEA, 1:1971*), investigates the determi-

nants of aggregate prices and uses his findings to examine the price inflation of recent years. While Gordon finds that wage movements explain most of the observed movements in prices, he identifies indirect business taxes and the cost of capital goods and raw materials as other "costs" helping to explain prices and, unlike some other researchers in this area, finds that cyclical movements in aggregate demand account for a noticeable variation in the markup of prices over costs.

The importance of the demand effect is the most striking and most controversial aspect of Gordon's findings. Econometric research that has found very weak or nonexistent cyclical shifts in prices relative to costs implies that accelerations and decelerations of inflation are generated mainly in markets for labor and raw materials, with most industrial sectors merely passing these cost changes through to the consumer. According to Gordon's results, however, margins do fluctuate cyclically, intensifying inflation in a boom economy and conferring an anti-inflationary bonus in a slack period such as 1975–76.

For his analysis, Gordon separates the prices of domestic food and energy from the remainder of domestic private prices. He excludes energy prices on the obvious grounds that recent changes have been governed by noneconomic factors—by the world-cartel oil price and by a variety of government regulations covering domestic pricing of oil and natural gas. He excludes food for less conventional reasons. While farm prices are only weakly related to cost and demand conditions in the rest of the economy, the farm-to-market portion of food costs is conventionally lumped with the rest of the nonfarm economy for analysis. However, Gordon calculates that food prices rose by unusual amounts in recent years, even after making full allowance for the rise in farm prices, and thus chooses to separate them from prices in the rest of the private economy. He thus focuses his historical analysis of price behavior, as well as his examination of recent years, on the private nonfood (as opposed to nonfarm) nonenergy sector of the economy.

Gordon calculates that about one-quarter of the rise in private product prices between mid-1971 and mid-1975 came from domestic food and energy prices. This still leaves to be explained an average annual rate of increase of 5½ percent in his private nonfood nonenergy index over this period. The historical equations, estimated with data ending in 1971:2, explain the price *level* in 1975:3 very well, attributing the unusual increase that occurred primarily to wages in the latter part of the period and

to raw-materials prices and the effect of high aggregate-demand levels on price margins in earlier quarters. But the equations badly overpredict inflation from 1971:2 to 1973:3 and then make up for it with large underpredictions from 1973:3 to 1975:1, followed by overpredictions again in the next two quarters. From these results, Gordon draws two major conclusions. The pattern of over- and underpredictions reinforces his earlier conclusion (*BPEA, 3:1973*) that controls squeezed prices relative to costs but that normal relations were restored after controls ended. The on-target prediction of the price level in 1975:3 leaves him with no unaccountable change in price margins between mid-1971 and mid-1975, in contrast with Charles Schultze's earlier finding (*BPEA, 2:1975*) that margins, adjusted for the business cycle, had widened substantially over that interval.

Part of the difference between Gordon's and Schultze's findings on price margins can be attributed to the larger subtraction for energy costs that Gordon makes. Another part comes from the price increases Gordon assigns to the nonfarm portion of the food sector, a portion that Schultze and other investigators analyze as part of the private nonfarm economy. Using historical relationships, Gordon substantially underestimates the increases in food prices actually experienced, even given the rise in farm prices; but having removed food from his main analysis, he has less price increase to explain in the nonfood sector and finds no unusual behavior in margins there between 1971 and 1975. Finally, part of the difference is in the relatively large weight that Gordon finds for the effect of demand on the margin of prices over cost. For his aggregate price index, he measures demand by lagged values of the ratio of unfilled orders to capacity in durable-goods industries. The discussion at the meeting questioned whether this measure accurately depicted economy-wide demand pressures and, in particular, whether it accurately captured the effects of demand in 1974, when activity had turned down by most measures but when, according to Gordon's index, demand continued to contribute to the predicted inflation rate.

The general acceleration of prices experienced in recent years was highlighted by an extraordinary increase in prices of primary commodities. In the last article of this issue, Richard Cooper and Robert Lawrence analyze this boom and the subsequent sharp decline in commodity prices. Even leaving aside crude oil as a special case, a broad measure of other primary-commodity prices more than doubled between mid-1972 and mid-1974.

While both the timing and the extent of increases differed from commodity to commodity, the sharp rise in prices was widespread and affected virtually all foods and raw materials. Then, by mid-1974, as the industrial world was sinking into deep recession, prices of commodities other than oil and some foods were falling sharply.

While special circumstances surrounded the movement of prices of many individual commodities, the authors concentrate on the big picture, analyzing the historical relation between global economic conditions and two broad averages of commodity prices, one for agricultural raw materials and one for metals. Applying their historical analysis to recent developments, Cooper and Lawrence first investigate the degree to which recent price movements can be explained by conventional economic analysis of the general demand for and supply of industrial raw materials, and then consider the possible role of "speculation" or inflation-hedging demand for commodities as special factors in the recent experience.

Using econometric techniques to explain the behavior of commodity prices since 1950, Cooper and Lawrence find that industrial production in the highly developed noncommunist nations, together with the price of manufactured goods, offers a useful explanation of historical movements in commodity prices. When world industrial production is above its growth trend, the price of commodities relative to manufactured goods also tends to be above its trend. When production is below trend, so are relative commodity prices. Equivalently, changes in industrial production, either up or down, lead to changes in relative commodity prices in the same direction, regardless of the actual level of production or commodity prices. This implies that commodity prices are very sensitive to industrial production and can be expected to rise from recession lows as soon as production starts increasing rapidly, even if from depressed levels, or to start falling from cyclical peaks when production flattens out or turns down, even if production is still at relatively high levels.

The authors tackle the crucial question of how well the price changes since 1972 could have been anticipated by predicting them from an equation fitted only through 1970. They calculate that, although the coincident booms in the United States, Europe, and Japan caused rapid increases in world industrial production in both 1972 and 1973, production had started the period from depressed levels and was above trend only in 1973. Using these data on production and those recording the substantial inflation in manufactured goods, they find that metals prices rose much less than pre-

dicted during the second half of 1972 and the first quarter of 1973, and then rose quickly to levels much higher than predicted through the first half of 1974, well after world industrial production had peaked.

Cooper and Lawrence associate the large price increases of this latter period with "speculation," broadly defined, and discuss several potential explanations for it. The public preoccupation with the limited size of known material reserves and with the finiteness of the earth's ultimate resources may have crept into the thinking of businessmen, and reinforced a vigorous boom by encouraging anticipatory buying. Inflationary expectations may have intensified speculative behavior in commodity markets and caused businessmen to purchase above-normal amounts of raw materials in the expectation that even the historically high prices they were paying could be recouped through higher prices of finished goods. The extreme and unusual uncertainty regarding exchange rates at this time may have driven businessmen to buy raw materials as a hedge against volatile currency prices. Evidence of such behavior appeared most prominently in Japan, where large positions were taken in copper, a development that served both as an anticipatory buying of commodities needed for future production and as a way to reduce large dollar holdings of uncertain value. Finally, the price controls on commodities in the United States may have stimulated some speculation by increasing the expected excess demand for commodities in the uncontrolled world market.

Cooper and Lawrence turn to the possibilities of stabilizing market prices in the future and opt for buffer stocks of commodities, as opposed to direct control of prices, as the most desirable way to limit price movements. Sales from buffer stocks can satisfy the demand that temporarily runs ahead of production, and the prospect of sales from such stocks can inhibit destabilizing speculation. The authors estimate that the cost of holding the stocks needed for a substantial stabilizing effort would not be very large, and that sales from stockpiles of between 1 and 2 percent of U.S. consumption would have been sufficient to prevent the price movement in 1973 from going more than 15 percent above its trend.

In the report that concludes this issue, Martin Feldstein discusses the importance of temporary layoffs in the total unemployment picture. Many economists have focused on the different ways that people initially become unemployed—by entering or reentering the labor force, by quitting their jobs, or by losing them. Feldstein decomposes this last category, empha-

sizing anew the distinction between job losers who are permanently discharged and those who are temporarily laid off with the prospect of recall.

Since temporary layoffs are not systematically tabulated in the standard data series, the paper relies upon several bodies of evidence to appraise their importance. All in all, the various figures suggest that temporary layoffs involve much shorter spells of unemployment than do those stemming from permanent discharges; that, among job losers, they account for roughly 40 percent of the time spent in unemployment and more than half of the number of spells of unemployment; and that they are followed by an eventual return to the old jobs in about 85 percent of all cases.

In Feldstein's judgment, traditional models of unemployment do not square with these facts. The typical Keynesian view of cyclical unemployment is inconsistent with the relatively short spells of joblessness experienced by those on temporary layoff. And the search model is inapplicable since most workers who are temporarily laid off wait for recall rather than actively hunt for other jobs. Feldstein suggests that further research on temporary layoffs is needed to throw light on the Phillips curve, wage inflexibility, and the disincentive effects of the current system of unemployment insurance.

ERRATUM

In figure 1 of Arthur M. Okun, "Inflation: Its Mechanics and Welfare Costs," *BPEA, 2:1975*, pp. 374–75, the wholesale price index of sensitive industrial materials (except fibers) (bar D) for the period 58:2 to 59:2 should have been plotted to show an *increase*, rather than a *decrease*, of about 8 percent.