Research Department Federal Reserve Bank of San Francisco October 11, 1974

International Money

Potential causes of the world's abnormal rates of inflation are easier to come by than potential cures. Still, part of the problem of devising solutions stems from the difficulties of diagnosis. Dozens of competing explanations have been advanced in the recent past, ranging from the workings of the international oil cartel to the now-famous disappearance of the Peruvian anchovies. However, an increasing amount of research is now being devoted to monetary explanations of the worldwide upsurge in prices.

Expansion of monetary base

Monetary analysts link the domestic inflation since the late 1960's with the rapid growth of the U.S. monetary base and thus the U.S. money supply. These analysts also argue that the expansion of the U.S. monetary base has been an important determinant in inflation rates in foreign countries because it led to expansion in the monetary bases of these countries. The rapid growth of the U.S. monetary base has tended to increase U.S. prices and diminish the value of the dollar on foreign-exchange markets. To maintain dollar exchange rates within predetermined bands, foreign central banks had entered exchange markets periodically to purchase dollars. These dollar purchase operations had the same effect as domestic Federal Reserve open market operations, leading to increasing the monetary bases of foreign countries and thereby their domestic money supplies.

The liabilities of foreign central banks (another name for the monetary base) are matched by both domestic government debt and foreign-exchange reserves. In fact, changes in foreign-exchange reserves have dominated the movements of the monetary base in most industrial countries during the period of fixed exchange rates. Under a fixed exchange-rate system surplus countries (other than the U.S.) had an undesirable choice either revalue the currency, thereby hampering the export sector by making export goods more expensive, or accept the impact of the reserve inflow on the monetary base, adding further to money growth and inflationary pressure.

Central banks can sterilize such reserve inflows in the short-run if they are relatively small. However, if the inflows are large or continue for a long period of time, they will affect the domestic money supply.

Given that in each country domestic currency growth determines domestic prices, it follows that the course of world prices depends closely on the rate of growth of the world money supply. However, they now have to face the question of whether floating exchange rates—albeit managed to some degree by central banks—will diminish the inflationary pressures on world prices. This question is related to the fixed-vs- floating exchange-rate controversy.

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Expanding world base

Monetarists contend that control over the money supply, internationally as well as domestically, depends on control over the monetary base. Consequently, they are now giving close attention to alternative measures of a world monetary base. One such measure is published in the annual report of the Italian central bank, Banca d'Italia, and is called the international liquidity base. The sources of the world liquidity base include monetary gold, IMF ordinary and special drawing rights, unused credit lines at the IMF and the Federal Reserve Bank of New York-and most importantly, U.S. and U.K. liquid liabilities to official holders. (The total does not include domestic assets held by central banks.)

The world liquidity base has grown spectacularly since the late 1960's, and has supported the vast increase in the world money supply. The sharpest growth—almost \$22 billion—came in 1971, when it expanded more than in the preceding three years put together. Two-thirds of that 1971 upsurge was due to a sharp increase in foreign official holdings of dollars, associated

mainly with the severe monetary crisis which culminated in the devaluation of the dollar.

Official foreign-exchange reserves
—a primary component of the world liquidity base—have soared from \$32 billion in 1969 to almost \$138 billion in mid-1974. At the same time, a sharp discrepancy—\$7 billion in 1969, but \$48 billion in 1973—has appeared between this total and U.S.-U.K. liabilities to official foreign institutions. The discrepancy indicates that foreign-exchange reserves are being "created" without an off-setting U.S. or U.K. official liability.

The source of this unexpected international-reserve creation is the Eurocurrency market. In that market, the funds deposited by foreign central banks expand through Eurocurrency loans and later reappear as official foreign-exchange reserves. The process has been noted recently, of course, in connection with the placement of the flood of dollars from the oil-exporting countries. In its annual review of the Eurocurrency market, the Bank for International Settlements noted the expansionary influence in 1973 of \$8-10 billion in deposits by official

monetary authorities, mainly attributable to the "fairly sharp expansion of the reserves of the developing countries." That influence will burgeon in 1974 and later years.

Dollars and floating rates

The future of the dollar in foreign-exchange markets will depend not only on the supply of dollars, but also on official and private demands. Some analysts contend that the system of floating exchange rates will affect official and private demands differently. The official demand for dollars should decline under this regime, but private demands could increase, because other currencies would then be less perfect substitutes for dollars, the primary international-trading currency.

The system of floating rates allows countries to insulate their domestic money supplies from outside mone-

tary movements, by permitting exchange rates to appreciate or depreciate. The question still remains, however, how much countries will allow their exchange rates to move in order to secure control of domestic money growth and their domestic rates of inflation. Nor will it be costless for monetary authorities to pursue policies to reduce rates of money growth.

While flexible exchange rates may provide the mechanism for countries to determine to some extent their domestic rates of inflation, money growth still has a large short-run impact on output and employment. Coincident reductions in money growth across the globe will possibly mean a reduction in the rate of growth of world output. But apparently, little choice remains if inflation is to be curtailed to any significant degree.

Joseph Bisignano

Business Review

The current (September) issue of the **Business Review** carries the recent testimony of John J. Balles, President of the Federal Reserve Bank of San Francisco, before the House Banking and Currency Committee. In his testimony, Mr. Balles presents four major policy recommendations concerning ways of fighting inflation and high interest rates. Another feature of this issue is an analysis of the inflation-unemployment trade-off by Larry Butler, entitled "The Relation Between Income Growth and Unemployment." See page 4 for information on obtaining copies of this issue.

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Research Department Federal Reserve Bank of San Francisco

BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT (Dollar amounts in millions)

Amount Change Change from **Selected Assets and Liabilities** Outstanding from year ago **Large Commercial Banks** 9/18/74 Dollar Percent 9/25/74 918 Loans (gross) adjusted and investments* 83,472 +7,78310.29 Loans gross adjusted-66,990 848 +8,516 14.56 Securities loans 1,583 731 428 37.06 Commercial and industrial +3.49023.955 90 17.05 19,914 Real estate 36 +2,29813.04 Consumer instalment 716 9.557 + 40 + 8.10 U.S. Treasury securities 3,965 -1,16465 22.69 Other Securities 5 12,517 + 3.59 431 Deposits (less cash items)-total* 80,444 654 +6,436 8.77 Demand deposits adjusted 22,146 510 +1,0294.87 U.S. Government deposits Time deposits—total* 899 58 182 16.84 +5,28055,936 363 10.42 17,697 28,814 24 + 51 + 0.29 Savings +5,018 Other time I.P.C. 157 21.09 + + State and political subdivisions 39 3.25 5,984 + 201 (Large negotiable CD's) +3,295335 26.78 15,600 Weekly Averages of Daily Figures Week ended 9/18/74 Comparable year-ago period Week ended 9/25/74 **Member Bank Reserve Position Excess Reserves** - 54 102 23 Borrowings 204 147 88 Net free (+) / Net borrowed (-) -258 45 65 Federal Funds-Seven Large Banks Interbank Federal fund transactions Net purchases (+) / Net sales (-) +521+1,362-996

Transactions: U.S. securities dealers

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+945

+1,064

+150

Net loans (+) / Net borrowings (-)
*Includes items not shown separately.