Research Department Federal Reserve Bank of San Francisco

June 4, 1976

The World and the Cycle

This has been an unusual business cycle. We were pleasantly surprised in early 1976 by the strength of the recovery in income and employment and by the significant fall in inflation and interest rates. This was the other side of the coin of the unpleasant surprise we encountered in 1974 and early 1975 with the unexpectedly severe decline in income and employment associated with historically high inflation and interest rates.

There may be a common explanation for the good news of early 1976 and the bad news of 1974-75. The explanation is not that the standard laws of supply and demand have been repealed—but rather that a worldwide business cycle phenomenon has affected the U.S. in recent years, in contrast to the more domestic nature of the cycle in earlier decades.

Worldwide cycle

International influences, although by no means unimportant, had not been crucial influences on the U.S. economy until fairly recently, when the major industrial countries found themselves in a synchronized business cycle. In earlier periods, when one country was in a rising phase, other countries generally were in the falling phase of the cycle. As a result, world demand for internationally traded goods tended to grow at a steady rate, and international prices either remained stable or, as in 1968-72, increased at only a moderate pace. But then an inflationary boom

developed, and industrial-export prices of major industrial nations more than doubled by mid-1975.

A number of factors helped explain this phenomenon, but they could be summarized by a single statistic—international liquidity or world money, measured by the major industrial countries' holdings of dollars and other international financial reserves. International liguidity grew at a 3 percent annual rate between 1954 and 1968, and at about 7 percent annually between 1968 and 1971, but it more than doubled between 1971 and the abandoning of fixed exchange rates in early 1973 before tapering off. While special factors—such as the oil cartel and crop failures—played a role, one of the dominant factors in world inflation during that period was the growth of world liquidity. It helped explain both the sharp price acceleration in mid-1972 and the sharp deceleration in mid-1975.

Liquidity and prices

International reserves are a component of each country's monetary base, against which the domestic money supply is created. A central bank's purchase of a dollar of international reserves affects the monetary base in the same way as the purchase of a dollar of Treasury bills by the Federal Reserve's Open Market Account.

From 1970 through March 1973, the world's major industrial countries accepted an unprecedented inflow of international reserves in the form

Research Department Federal Reserve Bank of San Francisco

Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, nor of the Board of Governors of the Federal Reserve System.

of dollars. They did this in order to maintain fixed exchange rates in a period when many private investors were switching out of dollars into other currencies. At the time, policymakers recognized the development of the "dollar overhang" problem—the sharp buildup of international reserve holdings. But many of them failed to realize that the counterpart of the dollar overhang was a simultaneous expansion in the domestic money supplies of the major industrial countries, which led to double-digit money growth in most of those countries.

Thus, worldwide "monetary ease" led to a simultaneous business-cycle expansion, which placed great pressure on prices of internationally-traded goods as well as prices of purely domestically-traded goods. With a lag of two to three years, the sharp buildup of international liquidity exerted a severe impact on the prices of internationally-traded goods.

Domestic consequences

World inflation has had a major impact on a wide range of U.S. goods—predominantly petroleum products, but other commodities as well. This is especially evident in the wholesale price index, in which about half of all prices are determined by international markets. Although world prices in the past

normally moved independently of WPI movements, this was not true during the 1973-74 inflation, nor was it true during our recent happier experience. Because of the rise in world prices, U.S. inflation in 1973, 1974 and early 1975 was higher than would have been the case for strictly domestic reasons—and because of the fall in world prices, domestic inflation in early 1976 was below what strictly domestic conditions would have dictated.

These world developments have affected domestic financial markets, at least indirectly. The effect of inflation expectations on long-term bonds is well understood, but the effect on short-term securities is less apparent. However, the observed market interest rate can be considered made up of two elements: the "real rate" (or real cost of funds) and an inflation premium. The inflation premium for shortterm securities, such as the commercial-paper rate, tends to reflect the most recent rate of inflation. On this basis, most of the historically high interest rates in 1974 were due to the high rates of domestic inflation, while the relatively low short-term rates recorded in early 1976 reflected the sharp deceleration of inflation.

Because U.S. inflation has been dominated by foreign as well as

domestic influences over the last three years, the inflation has not (as in the past) followed the U.S. business cycle. As a result, short-term interest rates, which generally follow the inflation rate, have failed to move in line with U.S. cyclical movements.

Future implications

What does this evidence suggest for the future? First, it suggests that we are living in a highly interdependent world, where domestic monetary and fiscal policies no longer reign supreme in influencing each country's economic health. Even the U.S. can no longer be considered a closed economy. While only 6 percent of our GNP is imported, 20 to 30 percent of our consumer prices—and 50 percent of our wholesale prices—are determined in world rather than purely domestic markets.

This point was not clearly appreciated in the past because the world at that time did not follow a synchronized business-cycle path. The situation has changed significantly in the 1970's, however. The critical question for the future is, will we continue to follow a worldwide boom-and-bust scenario or will we return to the more uncoordinated patterns of the 1950's and 1960's? The answer to that question depends on government policy deci-

sions in the U.S., Europe and Japan, as evidenced by the trends in world liquidity. At present, most industrial countries face high unemployment levels, and are thus following easymoney policies towards recovery. If they adopt relatively moderate policies, as the U.S. is doing, we may avoid a repeat of the last three years. However, if governments follow aggressively easy policies in order to return quickly to full employment, the story may be different.

Some observers fear a resumption of the earlier inflationary experience. In seven of ten major industrial nations, the 1975 monetary expansion exceeded that which occurred in the previous inflationary boom. Only Japan, the U.S. and Switzerland (and possibly Germany) have been following moderate money-growth paths. Given the interdependence of world economies, continued monetary expansion of this type could stimulate inflationary pressures and prevent the U.S. from achieving the amount of price stability that our current policy actions would warrant. According to this analysis, the effects may not show up immediately, especially in view of the long lags involved in this type of process, but problems could be encountered some time in 1977.

Michael W. Keran

Alaska • Arizona • California • Hawaii Idaho • Nevada • Oregon • Utah • Washington

Research Department Federal Reserve Bank of San Francisco

FIRST CLASS MAIL U.S. POSTACE PAID PERMIT NO. 752 San Francisco, Calif.

BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 5/19/76	Change from 5/12/76		Change from year ago Dollar Percent		
1 / 1: . 1 1:		_		T		
Loans (gross, adjusted) and investments*	87,372	+	50	+ 1,8		+ 2.20
Loans (gross, adjusted)—total	65,864	+	223		28	+ 1.43
Security loans	1,357	+	163		18	+ 1.34
Commercial and industrial	22,374	-	48	- 1,3		- 5.57
Real estate	19,857	+	12		09	+ 1.06
Consumer instalment	11,025	+	17	+ 1,1		+ 11.72
U.S. Treasury securities	9,250	-	220	+ 1,2		+ 15.94
Other securities	12,258	+	47		23	- 2.57
Deposits (less cash items)—total*	86,634	-	459	+ 1,9	48	+ 2.30
Demand deposits (adjusted)	23,485	-	817	+ 8	37	+ 3.70
U.S. Government deposits	638	+	193	+ 2	56	+ 67.02
Time deposits—total*	61,115	-	24	+ 7	12	+ 1.18
States and political subdivisions	6,658	-	9	- 9	95	- 13.00
Savings deposits	26,147	+	0	+ 6,2	50	+ 31.41
Other time deposits‡	26,174	-	48	- 3,1	11	- 10.62
Large negotiable CD's	11,027	-	92	- 4,7	96	- 30.31
Weekly Averages	Week ended Week		ended	Cor	nparable	
of Daily Figures	5/19/76		5/12/76		year-ago period	
Member Bank Reserve Position						
Excess Reserves	+ 47		_	7	+	29
Borrowings	+ 16			0		0
Net free(+)/Net borrowed (-)	+ 31		_	7	+	29
Federal Funds—Seven Large Banks						
Interbank Federal fund transactions						
Net purchases (+)/Net sales (-)	- 244		+	145	+	1,718
Transactions of U.S. security dealers						.,0
Net loans (+)/Net borrowings (-)	+ 153		+	558	+	476

^{*}Includes items not shown separately. ‡Individuals, partnerships and corporations.

Editorial comments may be addressed to the editor (William Burke) or to the author. . . . Information on this and other publications can be obtained by calling or writing the Public Information Section, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 544-2184.