# september



Inflation and Economic Policy

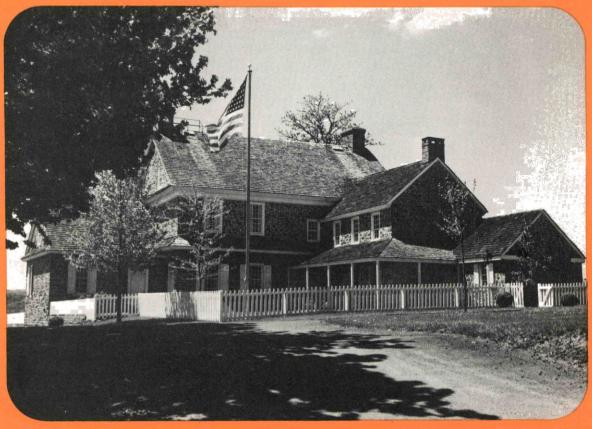
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The Fed in Print

FEDERAL RESERVE BANK of PHILADELPHIA

# business review



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1974

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On our cover: West of Pottstown, Pennsylvania, off US 422, stands Pottsgrove Mansion. Built in the 1750s by John Potts, a wealthy ironmaster, the Georgian mansion has withstood well the passage of two centuries as an example of outstanding colonial architecture. (Photo by the Pennsylvania Historical and Museum Commission, Harrisburg, Pa.)

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Federal Reserve Bank of St. Louis

# Inflation and Economic Policy\*

By David P. Eastburn, President Federal Reserve Bank of Philadelphia

I welcome the opportunity to be with you today. When Congress created the Federal Reserve System over 60 years ago, it was fearful of too much power concentrated in too few hands. Thus, it wisely established a decentralized central bank with powers shared by a seven-man Board of Governors in Washington and 12 regional Banks throughout the country, all outside the Executive Branch. But this organizational arrangement in no way was intended to reduce the accountability of the Federal Reserve to Congress. We are a creature of Congress and accountable to it. I think it is most appropriate, therefore, that Federal Reserve officials testify frequently before the various committees of the

Congress and also that from time to time you hear from the Presidents of the various Reserve Banks

I should like to talk briefly about four closely related problems: causes of inflation; what to do about inflation; the role of interest rates; and evening out the burdens of fighting inflation.

#### **CAUSES OF INFLATION**

If we could somehow create an economic discomfort index the way weathermen combine temperature and humidity, I suspect we would find ourselves about as uncomfortable as at any time in recent years. Prices are soaring, the unemployment rate is creeping up, and interest rates are at record levels.

Without minimizing any of the difficulties we face, I believe the major problem is inflation. We are in perhaps the worst peacetime inflation in our history. Unless we begin to unwind inflation,

<sup>\*</sup>Testimony before the Committee on Banking and Currency, U. S. House of Representatives, Washington, D. C., July 17, 1974.

I am fearful of the consequences not only for the economy but for our entire social fabric.

Our current inflation has many causes, but it is helpful to divide them into two main aspects. One aspect involves extraordinary events such as crop failures, oil embargoes, and dollar devaluations. They come and go and often not much can be done about them. Beef prices skyrocket then taper off; wheat supplies diminish then expand; anchovies disappear from the coast of Peru and then reappear. If we are lucky, these phenomena occur at different times. In the last couple of years we have been unlucky; many extraordinary events have occurred together. A second aspect is monetary. Whatever immediate events may cause prices to rise —including shortages and higher wage costs—a higher price level cannot be sustained without sufficient money. In retrospect it would have been better if money had not grown so rapidly over much of the past decade. The reasons for this growth go to a large extent to considerations other than inflation which the Federal Reserve has believed to be important. Throughout much of the period there are primary concerns about the disadvantaged—those unemployed, living in dilapidated housing and attending crowded schools. Ample growth in money was necessary to meet these economic and social problems. In more recent periods, the Federal Reserve, partly reflecting views of Congress, has been concerned about the effects of high and rising interest rates. Still more recently, concerns for the stability of financial institutions have come to the fore.

Whatever the reasons, the consequence of this history is that we find ourselves with rapid increases in both prices and money. The question is how to deal with them.

#### WHAT TO DO ABOUT INFLATION

There are no quick or painless answers. Inflation has taken nearly a decade to build up and will take considerable time and discipline to unwind. There are, I believe, four essential requirements for dampening inflation.

First, we have to become more realistic about

our capacity to fulfill our wants. There has been a tendency in recent years to pass over a hard fact of life—scarcity of resources. We simply cannot fulfill all desires, for all people, all at once, although we may earnestly wish to do so. Scarcity is still with us even in an affluent society.

A second requirement for fighting inflation is a firm handle on fiscal policy. In this regard, Congress is to be congratulated for passing the recent budget reform bill. This legislation can give Congress the kind of control that is long overdue.

Third, I believe there is a limited role for an incomes policy. We've just been through 32 months and four phases of controls, and the economy has just plain had it with controls for awhile. But there could still be a useful role for monitoring and publicizing key wage and price decisions.

Finally, we need to keep a firm grip on money and credit. History teaches two lessons about the impact of monetary policy. One is that inflation cannot continue without the money to finance it. Therefore, if inflation is to be moderated, growth in money must also be moderated. A second lesson is that growth in money must be moderated slowly to avoid sending the economy into a serious recession.

Translated into current policy, these lessons mean that the recent 7 percent growth in money (the narrow money supply or M<sub>1</sub>) must be moderated over a period of time, and the time could be quite long. I believe it is important, therefore, for the Federal Open Market Committee to set long-run targets for moderating growth and then diligently pursue hitting these targets. In fact, the FOMC has been attempting such a procedure for over two years now. I'm hopeful that with experience and resolve we'll be able to improve the accuracy of our aim.

#### **ROLE OF INTEREST RATES**

What would such a policy mean for interest rates? I am uncomfortable with high interest rates, especially with the record levels we are currently experiencing. But we should be clear about two things: one is what is necessary to bring interest rates down; the other is the role

which interest rates play in combating inflation.

The Federal Reserve could try to lower interest rates by supplying money and credit more generously than it has. A faster growth rate for money would likely lower short-term interest rates temporarily, but only temporarily. Opening the money spigot further would add still more fuel to the fires of inflation. This in turn would add to inflationary expectations, and interest rates would rise as lenders protect themselves by building in larger inflation premiums. So, a looser monetary policy aimed at lowering interest rates now would eventually lead to higher rates.

The surer way to lower interest rates is by reducing inflation. In order to do this, the Federal Reserve has to be less generous in supplying money and credit. Cutting back on the flow of money and credit into the economy itself will push up interest rates temporarily. In time, however, slower monetary growth will lead to less inflation and lower interest rates. So, a restrictive monetary policy now aimed at slowing the rate of inflation will lead in time to lower interest rates, not higher ones.

In the meantime, we should recognize that interest rates are playing an important role in combatting inflation. I say this despite the fact that the effect of interest rates has long been debated. I believe, however, that rising interest rates do choke off some demand for credit and therefore do help to bring total demand for goods and services into better balance with the ability of the economy to meet these demands.

A final question remains, however: What is the impact of credit restraint and high interest rates on various sectors of our economy and society?

### EVENING OUT THE BURDENS OF FIGHTING INFLATION

One of the burdens of combating inflation will be a higher unemployment rate than we would like. I believe the benefits of moderating inflation will be widely distributed and therefore the burden of fighting inflation should be as widely distributed as possible. Liberalized un-

employment benefits, public service jobs, welfare reform, training and education programs are all ways of dealing with problems of those hit hardest by slack in the job market.

The financial burdens of a restrictive monetary policy are also not distributed evenly across the economy. High interest rates, for example, impact heavily on housing and some public projects. A logical question, therefore, is whether we could allocate credit in such a way as to smooth out the burdens or even favor some high-priority sectors at the expense of lower-priority ones. In other words, should the Federal Reserve allocate credit as well as *create* credit?

I approach this question with considerable sympathy. Forces at work in our society, especially over the past decade, confront us with aspects of the distribution of burdens and benefits with an urgency that we have never felt before. They will not go away. There is good reason for the Fed to consider the matter of the allocation of credit with great care and concern.

A few years ago I explored the question as thoroughly as I knew how in an article which I should be happy to submit for the record. I asked our research staff to undertake further studies of selective credit controls, their history and their efficacy. The first volume of these studies will appear shortly after the turn of the year. I should like now simply to make five points in summary.

First, selective credit controls are less necessary when markets are working well. One reason credit does not flow into markets such as housing is that artificial limitations are placed on interest rates and lenders. The point is that action to eliminate usury ceilings and other such restraints would make selective credit controls less necessary.

Second, the Fed's experience in attempting to direct credit into "productive" and away from "nonproductive" uses has not been good. The reason is that it becomes virtually impossible in

<sup>&</sup>quot;Federal Reserve Policy and Social Priorities," Business Review of the Federal Reserve Bank of Philadelphia, November 1970, pp. 2–8.

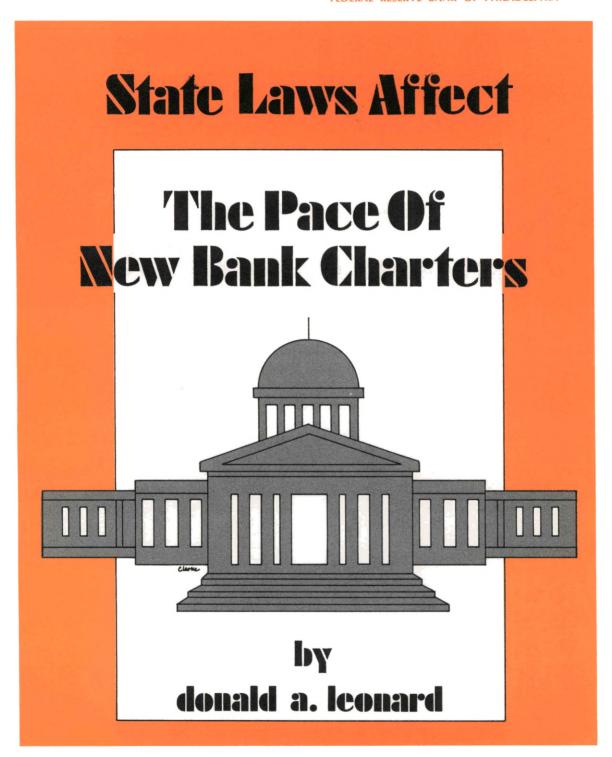
practice to determine which uses are really productive and which are nonproductive. I agree with those who believe that a basic solution to inflation is to enlarge the economy's ability to produce. My point is that selective credit controls offer little practical promise of directing funds in ways that will accomplish this. If, in fact, it should be part of policy to direct funds into capital investment, this is being done quite effectively by today's tight capital market.

Third, the idea that positive incentives might be helpful in directing funds in certain ways has a great deal of appeal. We in Philadelphia have done considerable analysis, for example, of the proposal that variable reserve requirements be placed on various kinds of bank assets. A lower requirement could be placed on high-priority loans and a higher requirement on lower-priority loans. Our research indicates a major problem: credit is extremely mobile and people are ingenious in substituting one kind of credit for another. If, for example, reserve requirements were to favor home mortgages over business loans, it seems inevitable that businessmen would simply by-pass banks to go to other lenders or the open market. An effective program of credit allocation would have to apply across the board. The workability of such a program seems questionable, to say the least. The costs could be enormous.

Fourth, if, in spite of these difficulties, Congress were to decide that credit should be controlled in accordance with certain social priorities, I believe that determination of these priorities is properly a matter for Congress, not the Federal Reserve.

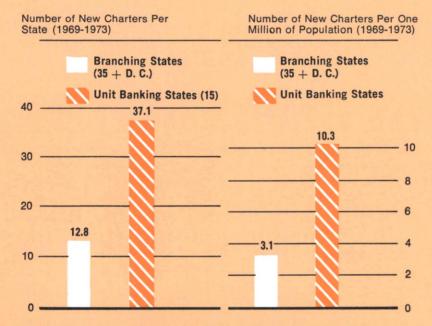
Fifth, the goal of stimulating certain sectors of the economy and restraining others might in some cases better be approached through fiscal rather than credit action. The variable investment tax credit is one possibility. Direct provision of funds for the mortgage market is already being employed. Other possibilities should be explored.

I conclude from all this that, over time, the question of allocating credit should be studied further. Our analysis to date, however, suggests serious problems. Perhaps the most important point is that if we can avoid inflation through general monetary and fiscal policy, we have less reason to be concerned with the allocation of credit. A program of credit allocation is no substitute for responsible policy in dealing with the overall supply of money and credit.



#### CHART 1

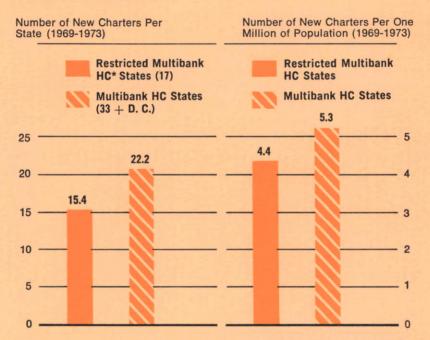
BANK CHARTERING ACTIVITY DEPENDS ON BRANCH BANKING LAWS AS WELL AS THE ATTRACTIVENESS OF NEW MARKET OPPORTUNITIES. IN STATES WHERE BRANCHING IS PROHIBITED, NEW OR EXPANDING MARKETS MUST BE SERVED BY ESTABLISHING NEW BANKS RATHER THAN BRANCHES.



Sources: American Banker (March 16, 1974), Association of Registered Bank Holding Companies Compilation of State Laws, Rand McNally International Bankers Directory, U. S. Census Bureau.

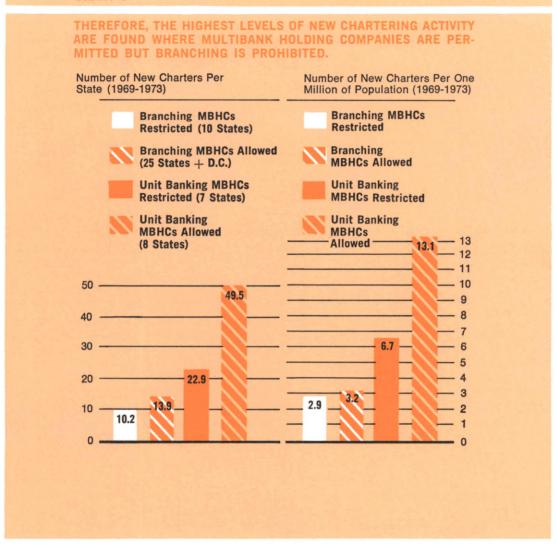
#### CHART 2

SIMILARLY, SOME MULTIBANK HOLDING COMPANIES HAVE USED NEW CHARTERS EITHER TO ENTER MARKETS WHERE THERE IS NO ATTRACTIVE ACQUISITION PARTNER OR TO EXPAND WITHIN MARKETS WHERE ANTITRUST REGULATIONS MIGHT LIMIT FURTHER BANKING CONCENTRATION.



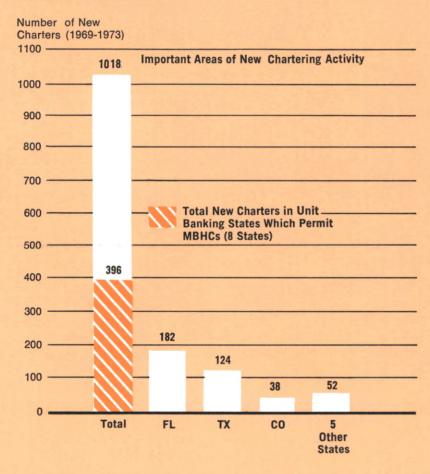
<sup>\*</sup> Restricted multibank holding company states are considered to be those states that at the very minimum prohibit a holding company from acquiring a 25 percent or greater share ownership in a second bank when there is demonstrated control in a first bank. This is comparable to the share ownership guideline used in the 1956 Federal law on bank holding companies.

#### CHART 3



#### CHART 4

PREDICTABLY, MORE THAN ONE-THIRD OF THE BANK CHARTERS GRANTED DURING THE PERIOD 1969 THROUGH 1973 WERE IN THREE RAPIDLY GROWING STATES—FLORIDA, TEXAS, AND COLORADO— THAT PROHIBIT BRANCHING BUT ALLOW MULTIBANK HOLDING COMPANIES.



# Foreign Exchange Markets: Booming and Bustling

By Janice M. Westerfield

Since Adam and Eve traded their stay in Eden for a piece of the forbidden fruit, people have been concerned with the benefits and costs of exchange. Indeed, the development of money as a "medium of exchange" represents an attempt to economize on the costs of trading by eliminating some of the inefficiencies of barter. Problems arise, however, when individuals use different kinds of money, as when trade occurs across international borders. French francs, convenient à toute outrance in a Paris dress shop, become bothersome if the desired gown sits in a New York boutique. Such inconveniences can be avoided, however, by simply trading francs for dollars—a simple task in today's welldeveloped foreign exchange markets.

Foreign currency markets are among the fastest growing of their kind in the world. Given the soaring volume of goods exchanged across international borders, a boom in currency exchange is not surprising. In addition, however, individuals and corporations can and do trade foreign currencies without any accompanying flow of real goods. In fact, new sets of institutions have recently developed to accommodate buyers and sellers of foreign exchange whose aim is quite simple—to "make a buck" through buying low and selling high. These new institutions reflect an innovating approach to the small investor's needs and thus complement the growth of international trade.

A number of factors, including the spread of multinational enterprises, the relaxation of capital controls, and the existence of a new international monetary system, have contributed to the growth in trade and expanded opportunities for profitable trading of foreign currencies. Whether exchange markets will continue their spectacular expansion, however, hinges on factors which are difficult to forecast, such as the possible reimposition of controls on capital flows and changes in the international monetary system.

## TRANSACTIONS VOLUME BOOMS IN FOREIGN EXCHANGE MARKETS

From almost all perspectives, activity in the foreign exchange market has soared in the last few years. Back in March 1966, the largest 15 or so banks in New York, the major foreign currency center in the United States, were turning over about \$10 billion monthly in selected foreign currency dealings among them. Three vears later these same New York banks were estimated to have doubled their monthly foreign exchange dealings. (However, these monthly figures are for selective currencies only and thus underestimate the size of the market.) Although hard figures for the foreign exchange market are very difficult to obtain, the \$500 billion figure sometimes cited as the size of the total annual transactions involved has been pooh-poohed as no more than "a drop in the bucket" by the chief trader of a large New York bank. Claiming 1973 showed "more foreign exchange trading than all of the world's GNP put together," he implied that his bank alone handled considerably more than \$200 billion in '72. As for year-to-year increases in transactions volume, during 1970-73 his trading desk experienced a 10 to 30 percent rise in volume each year.

Although New York is the hub of the financial action, there are many smaller banks dealing in foreign exchange whose trading business has flourished. The head of the trading department at a nearby Philadelphia bank, known for its foreign exchange trading, estimated that dealings more than doubled during the past year. That bank's turnover is now \$50 million per day—and in Philadelphia this is a sizable chunk of the action.

Besides the actual increase measured in dollar terms, the currency mix traded in the New York market over the last few years has changed considerably. Excluding the U. S. dollar, the pound sterling—the top currency in trading—accounted for more than half the value of the turnover in foreign exchange in '66 but since then has grown less than proportionately with the market. Nevertheless, it remains number one. In the mid-'60s, the Canadian dollar held

the place position, but recently the deutsche mark has probably taken over the runner-up spot. The dollar/German mark rate has become a leading indicator of the strength of the dollar. The Japanese yen and the Swiss franc have likewise experienced considerable increases in trading activities.

Locally the pound sterling is definitely the currency most in demand by corporate customers. One reason for this is that the Quaker City is a wool center, and wool is usually bought and paid for in sterling. By way of contrast, the Canadian dollar, while not as much in demand by Philadelphia commerce, constitutes a significant portion of the total currency traded because banks actively deal in this currency for their own account.

### REASONS FOR GROWTH OF FOREIGN EXCHANGE MARKETS

Foreign Trade. Expanding world trade is the most obvious and important reason for the burgeoning foreign exchange market. World exports, excluding those of the Communist bloc, have multiplied over five times since 1953, so that the increase in dollar volume traded from '72 to '73 was greater than the total yearly trade 20 years earlier. During the last three years alone, world exports swelled by 80 percent. During that same period U.S. merchandise exports grew 67 percent while U.S. imports increased 75 percent. In 1973 U.S. merchandise exports grew at a faster pace than GNP. In fact, some believe that the traditional 4 percent of GNP for U. S. exports may be giving way before the impact of the trade explosion.

Foreign exchange trading parallels the growth in international trade because monies facilitate the exchange of goods between parties. While commerce between residents of the U. S. involves only one currency, dollars, trade between a Philadelphian and a Berliner usually involves exchanging dollars into German marks or vice versa (see Box 1). The number of marks received for a dollar depends, of course, on the dollar price of marks, the exchange rate. Converting the home currency into the foreign currency is

#### BOX 1

#### A TRADE EXAMPLE

Suppose IBM makes computers in the U. S. and exports them to its marketing subsidiary in West Germany. The marketing subsidiary in West Germany in turn sells the computers to the West Germans, who pay for them in their domestic currency, Deutsche marks (DM). Suppose the subsidiary sells 500,000 DM worth of computers with payment to be made 90 days hence. So far so good. Now IBM is primarily interested in selling its exported goods at an economic profit. The question is what to do with the German marks. IBM has several alternatives. On one hand, IBM can wait until it receives the DMs and then sell them (buy dollars) immediately on the spot foreign exchange market. Then the dollars can be transferred to the home office for use in the United States. Since IBM doesn't know what the spot price will be in 90 days, some risk is involved. On the other hand, if the value of the DMs is relatively low in dollar terms when IBM receives them, someone in the firm may anticipate a better deal by speculating—holding the DMs and waiting a few days before exchanging them into dollars. Of course, DMs may fall as well as rise in value during the next few days, but that's part of the exchange risk which IBM accepts when it embraces this alternative.

No matter when IBM sells its DMs in the *spot* market, it has chosen to speculate. If it holds the DMs and sells later, IBM is to profit from the possible increase in value in DMs. In the meantime, if it sells the DMs now, it is to profit from today's rate since it can always sell later and borrow dollars at a cost if they're needed.

Is there any way that IBM can avoid the risk of a fluctuating exchange rate? Yes. If IBM wants to stay strictly in the business of selling computers in Germany, and out of the business of speculating against the \$/DM exchange rate, it can hedge its currency by selling a forward contract to be delivered in the future at a price agreed upon today. That is, IBM agrees to deliver 500,000 DM and accepts the price currently quoted in the 90-day forward market. Who buys the forward contract? The partner on the other side of the transaction may be another hedger, perhaps an importer in the U. S. who is expecting a shipment in three months for which he must pay in DMs. Or a speculator may want to buy DMs in the forward market, hoping to sell them immediately upon maturity in the spot market at a higher price than he paid for them.

achieved by contacting a local bank's foreign exchange department.

However, first the customer must decide whether he wishes to deal in the "spot market" or in the "forward market." The spot market provides for immediate delivery within two or three business days with payment upon delivery. The forward market, however, involves the purchase or sale of foreign currency at some specified future date (see Box 1). Although the

actual delivery may be weeks or months away, the price or terms of the trade are agreed upon today. Thus, the forward market allows traders to avoid the risk that exchange rates will change adversely between today and when they will make payment on the currency. The forward contract is simply a promise to buy or sell the currency in the future and is not backed by collateral, although a bank balance may sometimes be required.

Various market participants use these spot and forward markets for their operations. Speculators try to make money in foreign exchange by buying or selling foreign currency in an open (uncovered) position, accepting the risk of an adverse change in the value of their holdings in hopes of making a profit (see Box 1). While speculators may accept risks by taking either spot or forward market positions, others who wish to avoid speculating in the ups and downs of currency values use the forward market to cover or "hedge" their risks. Hedgers are in effect safeguarding against price changes by trading in the forward market.

Commercial banks provide foreign exchange market services primarily to meet their customers' needs. Although banks are often sensitive about the profitability of their exchange operations, those banks with foreign currency trading desks have recently seen them become profit centers in their own right. In addition 'to anticipating the demands of their customers, traders are frankly hoping "to make a buck."2 Banks have found recently that by accepting limited risks of uncovered currency positions, they can often make a handsome return. Morgan Guaranty, for instance, reported \$42 million gross income before expenses from their foreign exchange trading in 1973, more than double what they made the previous year. This figure, representing about 4 percent of their gross

¹Another group of market participants, called arbitrageurs, takes advantage of the difference in interest rates (as well as exchange rates) to invest funds in a foreign center for the sake of benefiting from the higher yield in that center. Thus, an arbitrageur may invest DMs in the German economy by purchasing a short-term asset such as Treasury Bills. Whether or not this option is profitable depends upon the interest rates in Germany relative to the United States and on the spot and forward exchange rates between the two countries.

<sup>2</sup>Some banks have recently learned the hard way that risks taken in foreign exchange markets can spell disaster as well as handsome profits. Bank traders can face these currency risks whether they trade for their own account or for a customer's account. Highly publicized losses in foreign exchange by Franklin National Bank and Bankhaus I. D. Herstatt of West Germany attest to the high stakes sometimes involved.

operating earnings, may induce other banks to explore the profit potential in enlarging their trading desks.

Capital Restraints Relaxed. Although the growth in world trade has helped to provide the impetus for the mushrooming activity in foreign exchange markets, the recently completed relaxation of the restraints on capital outflows bodes well for the continued growth of currency trading. The Voluntary Foreign Credit Restraint Program (VFCR), the Interest Equalization Tax. and the Overseas Foreign Direct Investment guidelines had constituted a three-pronged strategy developed in the 1960s to help the U.S. balance of payments.3 Since the U.S. had been experiencing continual dollar outflows which contributed heavily to the balance of payments deficit, these programs aimed to limit flows of funds abroad.

By early 1974, however, not only had Uncle Sam's trade balanced improved, but the dollar was strong in exchange markets as well. Thus, the pressure to restrain dollar outflows diminished. Since these programs terminated in January 1974, firms and individuals have been free to pursue whatever investment strategies will yield the most profit, regardless of location. For example, corporations are free to invest considerably more than the \$5.3 billion that they invested in 1972 under the Overseas Direct Investment Program. Similarly, since the U.S. Treasury reduced the Interest Equalization Tax to zero, an American buyer of a foreign stock or bond no longer faces this additional cost previously imposed upon him. A few months ago he had to accept a .75 percentage point reduction in the effective yield, and the borrowing firm no

<sup>&</sup>lt;sup>3</sup>The VFCR, administered by the Fed, was aimed at restraining foreign lending and investments overseas by U. S. banks and other financial institutions. The Foreign Direct Investment restrictions, which were operated by the Department of Commerce, set ceilings on the allowable investment overseas and the transfer of funds to foreign affiliates by U.S. corporations. The Interest Equalization Tax was imposed on stock or bond purchases from foreigners.

longer has to pay higher yields to compensate the lender at least partially for the tax. Termination of the controls enabled individual banks and corporations to expand their foreign lending and investments freely and to utilize the exchange markets in the process.

Sophisticated Portfolio Management. In addition to the greater freedom of capital movements, factors such as the sophisticated management of assets and liabilities by banks and multinationals, the relatively large companies that control most foreign investment, have played a substantial role in the growth of foreign exchange markets. In response to the high interest rates of recent years, corporate treasurers have managed funds much more carefully to insure that no opportunities for profit are overlooked. Mammoth sums are involved in these portfolios. A study by the U. S. Traffic Commission estimated that in 1971 banks and corporations held a \$268 billion pool of liquid assets, more than three times the \$881/2 billion of currency reserves held by the central banks of the industrial countries. This pool of short-term assets grew by \$100 billion over a two-year period. Large multinational corporations literally move billions of dollars through the currency exchanges every year. In investments alone, U.S. multinationals have been responsible for nearly \$80 billion in direct foreign investment by 1970.

Foreign exchange risks and opportunities are certainly factors which govern the movement of multinational funds. Exporting and importing firms are developing strategies to protect themselves against foreign exchange losses. Currency risks are increasingly hedged in the forward market on a regular basis, 4 so much so that the hedging of foreign exchange risks has become "just another cost" of doing business overseas. Elaborate strategies proliferate such as switching cash and other current assets into "strong" currencies

(those whose value in terms of other currencies is expected to appreciate) while piling up debt and other liabilities in currencies expected to depreciate. Multinationals develop good exchange trading relationships with their banks so that they may reduce exchange risk and proceed with the "legitimate" business of the multinational. This also makes it easy for them to transfer funds for purposes of realigning their investments or to incur a speculative position.

The continued expansion of multinational corporations along with the relaxation of capital restraints and burgeoning world trade activity have all contributed to the boom of foreign exchange trading. Still another avenue for growth, however, can be found in the development of new exchanges with expanding trading opportunities.

### NEW INSTITUTIONS JOIN BANKS IN PROVIDING EXCHANGE SERVICES

Although the bank system of spot and forward markets handles most foreign exchange transactions, several newcomers have arrived on the scene in the last five years.

The International Monetary Market. The most important of the newcomers is the International Monetary Market (IMM), a currency futures market which opened in May 1972 (see Box 2). A child of the Chicago Mercantile Exchange (CME), the IMM sees its role as facilitating foreign trade and investment by helping to insure against the risk encountered by importers, exporters, and international traders, resulting from fluctuations in the prices of various currencies. At present "futures" in seven foreign monies are traded, in addition to U.S. and Canadian silver coin futures. A futures contract specifies the purchase or sale of currency for future delivery. Trading is continuous in each contract from the time the first contract is issued until the delivery month. The contract sizes are standardized, and they range from about \$42,000 to \$100,000 in U. S. dollar equivalents (see Table for details). Traders pay a commission charge for each trade. Of course, multiples of the standard contract may be traded. (For a comparison of the IMM and

<sup>&</sup>lt;sup>4</sup>See Norman S. Fieleke, "Exchange Rate Flexibility and the Forward Exchange Markets: Some Evidence from the Recent Experience with the German Mark," New England Economic Review, May/June 1972, pp. 2–10.

#### BOX 2

#### **INTERNATIONAL MONETARY MARKET**

The International Monetary Market opened in Chicago on May 16, 1972 and has been growing ever since. The IMM originally traded futures contracts in seven currencies—the pound sterling, Swiss franc, German mark, Italian lira, Mexican peso, Canadian dollar and Japanese yen—and in May 1973 added the Dutch guilder. Spot contracts are not traded. A futures contract (similar to a forward contract in the bank market) is a standardized agreement to buy or sell the currency in a future month at a price agreed upon today. Futures are traded for the next three months and at three-month intervals thereafter up to eighteen months. All deliveries are made on the third Wednesday of the contract month.

The contract size is standardized for each currency and averages around \$70,000. All currency contracts are settled in terms of U. S. dollars. Each currency has a minimum fluctuation and a (normal) daily limit. For instance, the DM contract size is 250,000 DM with a minimum fluctuation of .00005 (\$12.50) and a normal daily limit of \$.005 or about \$1,250. In other words, the price of DMs is not permitted to change more than ½ a cent per DM (or \$1,250 for the contract value of 250,000 DM) in a normal trading day. The "round-trip" commission to buy a near futures and sell a longer maturity futures comes to \$45. Both the buyer and the seller are required to maintain a security deposit averaging 1 or 2 percent of the total value of the contract depending on the currency.

The IMM has modified several of its original specifications. A two for one split in all contracts but the Mexican peso and the Dutch guilder, effective June 1 of last year, made the exchange available to the moderate investor. New daily trading limits were implemented whereby if the currency closes at the normal limit for two successive days, the limit of the following days is expanded if necessary until the fifth day when there is no daily price limit.

Orders are executed in the trading pit by the floor brokers, who confirm the order to the member firms which then report all the transactions at the end of the day to the clearing house. The clearing house matches the trades and assumes the opposite side of the contract for both buyers and sellers. Besides making sure that the trading flows resulting from execution are orderly, the clearing house guarantees performance of the contract and oversees contract deliveries.

the bank market, see Box 3.)

The IMM has gradually strengthened its foothold in the market.<sup>5</sup> Comparing the June through December period in 1973 with the same time a

<sup>5</sup>The IMM may soon be facing some stiff competition. The New York Mercantile Exchange plans to open a futures market in foreign currencies in a couple of months. This new exchange will be modeled after the IMM with trading in the Italian lira and the commercial Belgian franc in addition to the seven currencies traded in Chicago. Contracts are standardized with the same trading units specified by the IMM to facilitate arbitrage between the two markets.

year earlier, the total number of equivalent contracts increased by 11 percent. Over \$35 billion worth of foreign exchange was transacted at the IMM in 1973. This figure includes a considerable spurt for December, which had by far the largest number of contracts traded in both years. Of the individual currencies the German mark and the Mexican peso were the biggest gainers percentage-wise, while the Canadian dollar and Swiss franc contracts lost ground.

The IMM in its infancy had the advantage of the communications system already set up at the Chicago Mercantile Exchange. Substantial

# NEW INSTITUTIONS OFFER STANDARDIZED CONTRACTS IN A NUMBER OF FOREIGN CURRENCIES

INTERNATIONAL MONETARY

MARKET				OF TRADE
Contract	U. S. \$	Fluct. Min.	Limit	Contract
25,000 BP	55,000	5 pts. (\$12.50)	300 pts.	1,000 BP
100,000 CD	100,000	10 pts. (10.00)	750 pts.	2,500 CD
125,000 DG	42,500	4 pts. (5.00)	600 pts.	10,000 DM
250,000 DM	90,000	5 pts. (12.50)	500 pts.	1,000,000 JY
12,500,000 JY	42,000	10 pts. (12.50)	600 pts.	10,000 SF
1,000,000 MP	80,000	1 pt. (10.00)	75 pts.	10,000 FF
250,000 SF	75,000	5 pts. (12.50)	500 pts.	1,500,000 IL

Effective January 1974

Key

	/			
BP	British pound			
CD	Canadian dolla			
DC	Dutch quilder			

CD Canadian dolla DG Dutch guilder DM German mark

IL Italian lira

JY Japanese yen MP Mexican peso SF Swiss franc FF French franc

commodities trading was already taking place with an organized group of floor traders, local speculators, floor brokers, and phone lines to banks and brokers elsewhere. Over three million contracts were traded on the CME in 1971. These factors reduced information and transaction costs of the untried contract and probably helped the IMM get off to an auspicious start.<sup>6</sup>

The American Board of Trade. Customers with pint-sized transactions in foreign exchange will welcome the appearance of another newcomer, the American Board of Trade Foreign Exchange Market located in New York City. Founded in 1969, the American Board of Trade (ABT) has been trading in foreign exchange since '71, yet it is not as well known in exchange

AMERICAN BOARD

commodities brokerage houses which service the country's speculators did not have telephone and Telex lines with this exchange, an ICE communications system was lacking. This discouraged new clients who did not have other business with the exchange. The small-sized contracts approximating \$25,000 discouraged bank participation.

<sup>&</sup>lt;sup>6</sup>The International Commercial Exchange, a currency futures market based in New York City, was not so lucky. It opened a couple of years ago and folded within a short time. In an explanatory brochure, international commodity brokers Brodie, White, and Company of New York highlighted some of the problems encountered by the ICE which were less likely to be obstacles at the IMM. Because most of the

BOX 3

#### DISTINCTIONS BETWEEN THE IMM AND THE BANK MARKET

Although the IMM complements and supplements the bank market by furnishing facilities for trading futures contracts in foreign currencies, there are several distinctions between the two markets. First, the market participants differ. Whereas the bank market is primarily for large transactions by banks, multinationals, and others with overseas operations, IMM's average single contract has a value of only \$70,000, so that in addition to the large concerns (who might want multiples of contracts), the contracts are within easy reach of the medium-size investor.

Second, the timing and frequency of delivery of the currency differ substantially in the two markets. Delivery dates are standardized and occur once a month in futures contracts at the IMM while forward contracts on the bank market may mature on any business day. Some 90 percent of the forward contracts are settled by actual delivery whereas futures markets such as the IMM have almost no deliveries. Why? Because contracts for June DMs are sold over a year previous to the maturity date of June 19 and can be offset by buying a June contract at any time until the last day of trading. The ease of offsetting a contract (that is, of cancelling out a purchase or delivery of currency for the same maturity date) in the futures market encourages offsets and facilitates the entry and exit of speculators. For instance, the customer can buy a June futures contract the previous December, close out (sell) the contract on June 1, and buy the spot currency at the bank. During this transaction, the customer is fully hedged. In other words, what he gains in the futures contract he loses in the spot market. On the other hand, the customer can simply purchase a forward contract to mature some day in June at the bank.

Whereas delivery dates and contracts are standardized in the currency futures markets, contracts are tailor-made (but at a price) to the needs of the individual in the bank market. The cost of a bank forward contract is the difference between the rate quoted on the purchase and simultaneous sale of a given forward contract with specified currency, and the cost varies with the size of the transaction. Banks attempt to marry the demands of their customers. Bank trading rooms typically have several traders seated at a desk with telephone and Telex communications to the customers, brokers, and other banks. Each trader deals with specific currencies and keeps an up-to-the-minute tally of the bank's positions.

markets as the IMM. The ABT deals in spot and 30-, 60-, 90-day forward contracts (see Box 4) much as the bank market does. Their basic objective is to "serve as an exchange and market place which will offer . . . sound and profitable investment and speculative mediums . . . until now unavailable to the average investor." Enticement for the small speculator is provided by standard unit contracts in the \$3,000 range. In addition to several foreign currencies, the ABT has markets in silver futures, spot silver, silver coins and silver coin futures, but has no broad

commodity base such as that of the Chicago Mercantile Exchange. It is impossible to get any volume data on this fledgling market but it appears to be holding its own.

The IMM and the ABT did not make their appearance on the financial scene without some economic justification. Indeed, the reasons for their development and growth can be traced to the changes in the international monetary system, the demand for speculative services, and the lack of inhibiting formal regulations on the foreign exchange markets.

#### BOX 4

#### **AMERICAN BOARD OF TRADE**

The Foreign Exchange Market of the American Board of Trade opened in New York City in September 1971. The ABT deals in forward contracts of seven currencies—the pound sterling, Swiss franc, German mark, Canadian dollar, Japanese yen, Italian lira, and French franc—the last two currencies being the only ones not covered in the IMM. Thirty-, 60-, and 90-day forwards are the primary contracts.

The standard unit contract varies from around \$2,000 to \$4,000 and can be purchased in multiples of two, five, or ten units. The purchase of a five-unit contract in DMs (50,000 DM) for 30 days and the simultaneous sale of a 90-day contract of the same amount entail a margin deposit of \$750 (about 4 percent) and a \$37.50 commission fee. (The investor establishes the spread and then liquidates it when the shorter contract has matured 30 days later by selling in the spot market and simultaneously purchasing a 60-day forward contract).

The ABT has made several innovations in the foreign exchange market. They offer options in maturities of three months, six months/ten days, and one year which are backed by actual futures positions. There are a variety of options not available elsewhere. An affiliate, the ABT Service Corporation, acts to assure a fluid and orderly market and cushion against "capricious" exchange fluctuations. The ABT does not permit members of the exchange to trade for their own account on the exchange floor; ABT administrative personnel execute orders on the floor of the exchange.

#### A New International Monetary Environment.

Nineteen seventy-one signaled several momentous changes in the international monetary system which IMM officials felt "created an environment conducive to a futures market in foreign exchange." One crucial element of the "new" system is that most exchange rate changes are no longer limited in size by formal agreements among trading nations. Under the old system of "fixed" exchange rates, foreign currency prices could not deviate up or down from specified values by more than a given percentage amount. Only rarely, when in a "fundamental disequilibrium," were changes in the parity values permitted. Presently, however, few such formal limits on the size of permissible price changes exist, so that currency prices are in principle free to "float" to values determined by the market forces of supply and demand—hence the term floating exchange rates. These market forces result in greater spot and forward rate fluctuations

on a day-to-day basis.<sup>7</sup> Greater price fluctuations translate into more opportunity for profit and loss. Hedgers therefore increase their demand for services to guard against the risk of currency price changes while speculators want more services enabling them to accept risks and exploit the workings of the market profitably. Speculators perform an essential function in encouraging the reshuffling of risks. By relieving hedgers and other traders of unwanted currency risks, speculators free them to concentrate on their "ordinary" day-to-day business. Both new

Teven the Canadian floating rate in the '50s, generally thought not to be too variable, was estimated to be 2½ times more variable than any of several fixed rates for the '60s. However, many floating rates are subject to varying degrees of government intervention, ranging from little or no government action to considerable government participation in a "managed" float. Most of the recent currency floats, especially those since March 1973, are of this latter type.

exchanges appear to have anticipated these international developments and hope to be able to supply a good portion of these required services. Since these innovators assume a positive view of the role of speculation in foreign exchange markets, they can open the door to a broad class of customers seeking foreign exchange services.

Speculation Encouraged. Speculators can hardly be blamed if they try to take advantage of the new profit opportunities available to them, yet when they try to finance through the local bank, they encounter a brick wall. "Speculation" is ostensibly a dirty word in the bank foreign exchange market, and it may include anyone trying to profit from exchange dealings. Bank traders feel that speculators raise costs for the legitimate businessman. Take the case of a local Philadelphia banker who is not prepared to do business with someone who is "merely speculating," only those with "legitimate" business.

Who is prepared to accommodate the speculator-investor? The IMM and the ABT. Far from having a bias against speculation, these exchanges actually encourage it. The ABT, in particular, is trying to attract the small speculator—witness the emphasis on being a "speculative medium" in their public statements. The small-sized contracts offered by the ABT are within range of the average investor and provide him with new speculative opportunities. In addition to interesting speculators, the ABT hopes to attract small transactors for whom the bank market is too costly or simply unavailable.

IMM officials also have some good words for the speculator. They not only believe the speculator lends "breadth, depth and resiliency" to the market, they believe the IMM can accommodate the speculator and other participants in small to medium transactions at a lower cost than the banks. Although the bank market may service a small account, the prices will not be very favorable. One reason the IMM gives for encouraging speculators-investors is that they increase the number of contracts traded and thus improve the chances that the bid-asked spread (difference between buying and selling prices)

will be reduced to a more competitive level. IMM's bank critics respond that the exchange market is not making the effort to attract a solid base of commercial firms.

Lack of Regulation. The absence of formal legal restrictions of foreign exchange markets probably encouraged the development of new institutions such as the IMM and the ABT. It is highly unlikely that such innovative growth via new institutions would have surfaced so rapidly in a regulated market. Although IMM officials discussed their proposed exchange with both the Treasury and the Fed, they did not have to secure approval from any government agency to begin operations. The unregulated market generally provides an atmosphere where innovative activity such as a currency futures market can flourish.

The potential threat of regulation of the bank market as well as the new exchanges and the wish to avoid the long arm of the government probably explain the paucity of statistics and the secrecy surrounding the magnitude of foreign exchange dealings.<sup>8</sup> Many bankers fear a move-

<sup>\*</sup>The ABT, in particular, is very protective of its current setup and resents what it considers to be harassment by government agencies and members of the financial community. The ABT appears to focus considerable energy in this fight against outside interference. It has even asked Congress "for protection against and an investigation of the illegal acts of suppression, repression and harassment" of the Securities and Exchange Commission and other government agencies. Clearly the prospect of any government interference is not taken lightly by the ABT.

In fact, government agencies have been checking up on the ABT and the American Association of Commodity Traders, which have a common organizational structure and are headed by the same man. Government action against the AACT has run the gamut from a subpoena for books and records by the SEC to the denial of nonprofit status by the IRS. The SEC is investigating the profit structure of this new exchange to determine if memberships should be classified as "securities" under the 1933 Act. If the SEC decides that the investment contract does involve "investment of money in a common enterprise with profits to come from the money of others" (the legal definition), the SEC may claim jurisdiction over these "securities" and subject the membership to registration.

ment toward control of foreign exchange operations carried out by commercial banks. Several countries have already set up procedures for regular reporting of forward operations. In the U. S. a reporting system is being developed to keep the Treasury informed of the spot and forward dealings of large banks and multinationals. England has instituted control restrictions on the position that banks can take either for or against the pound sterling. Recent losses in foreign exchange trading both in the U. S. and abroad have spurred speculation that the central banks may impose some restraints to head off further such losses.

#### **FUTURE PROSPECTS: MORE OF THE SAME?**

Since the trade flows between countries are likely to multiply, the opportunities for growth in foreign exchange are numerous. Whether the newcomers—the IMM and the ABT—thrive depends upon their ability to attract a faithful clientele and to provide services presently unavailable or too costly in the bank market. Bank traders will undoubtedly continue to service most of the growing currency market while at the same time engaging in exchange transactions for their own account.

Realization of these growth prospects depends upon several factors. Foremost among them is the type of international monetary system that evolves. Recently, an agreement on monetary reform was postponed almost indefinitely, reflecting the difficulties created by the oil situation as well as the opinion that the ad hoc system of "managed" floating rates probably averted a world-wide monetary crisis. H. Johannes Witteveen, Managing Director of the International Monetary Fund, concluded that "in the present situation a large measure of floating is unavoidable and indeed desirable." The energy crisis did provide a severe test of the floating system and convinced many that floating rates are working better than expected. It is unlikely that many countries will return to the old "stable but adjustable" rates in the near future.

While the energy crisis dashed hopes for a quick return to the adjustable peg, the huge oil payments to the petroleum-exporting countries may also mean large balance of payments deficits for oil buyers. These predicted deficits may tempt some countries to restore barriers recently removed from capital movements. Renewed barriers to investment and lending between countries would discourage foreign currencies from moving freely and thus put a damper on the growth of the foreign exchange market.

#### **GERMAN MARKS AND IBM STOCK?**

Foreign currency markets today are booming despite the possibility of exchange controls. Exchange markets will continue to finance growing trade in more closely integrated world markets. Relaxation of capital controls facilitates the movement of funds between countries. The current international monetary arrangement with its high degree of flexibility in rates presents increased currency risks which must either be covered by the hedger for a cost or accepted by the speculator for an expected return. Multinational corporations and large banks employ exchange markets to exploit these profit opportunities to the tune of millions of dollars.

Growth in trading volume has been supplemented by the emergence of new methods of trading, such as small-size contracts and a currency futures market. Both new exchanges, the IMM and the ABT, expand the scope of services available to the individual who wants to make money on foreign currencies. Future competition between the exchanges and the welldeveloped bank market may have a favorable impact on efficiency and pricing in the exchange-trading business. Indeed, a world where Mr. Average Investor makes a trip to the local foreign exchange market to buy some German marks for his investment portfolio along with his IBM stock may not be far in the future.

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