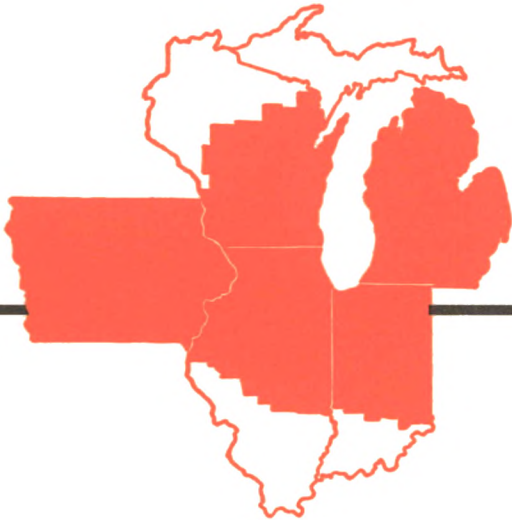


A review by the **Federal Reserve Bank of Chicago**

Business Conditions

February 1971



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Rebuilding America's Liquidity

**Remarks of Robert P. Mayo,
President of the Federal Reserve Bank of Chicago
before the Investment Analysts Society of Chicago
February 4, 1971**

In the present atmosphere of controversy on vital issues—foreign and domestic, social and economic—there is one area of all but universal agreement. It is that 1971 should see a continuous, quarter-by-quarter, rise in business activity. Substantial disagreement exists, however, as to the extent of the recovery, and the degree of success that will be achieved in moderating the twin evils of price inflation and unemployment.

It is my purpose today to outline the evidence that the financial foundations have already been laid for a sustained recovery. Easier monetary policy pursued during the past year has not yet accomplished its purpose. As long as there is substantial unused capacity in the form of manpower and facilities, Federal Reserve policy actions will continue to encourage the growth of bank deposits, other liquid assets, and the availability of credit. Acceptance of this view, however, does not imply that monetary ease can be pushed to any length without serious consequences.

Throughout the past quarter century, Federal Reserve policy has never lacked vigorous critics. These critics can be divided broadly into two groups—those who desire a more stimulative policy and those who

prefer a more restrictive policy. The former tend to emphasize the problem of full employment, the latter the problem of inflation. It certainly is no secret, now that the proceedings of the Federal Open Market Committee are published, that both points of view are always present *within* the councils of the System. Clearly, grave dangers exist in following one objective to the exclusion of the other. Like the yang and yin of oriental philosophy, the joint objectives of moderating unemployment and restraining inflation are opposed, but also complementary. As we have seen several times since World War II, excessive price increases inevitably cause imbalances, reduced productivity, and added unemployment. It is the responsibility of the monetary authorities to find the most appropriate path to stable growth and prosperity. I should add, insofar as it is in their power. Monetary policy is not omnipotent. There are no precise relationships between monetary developments, however measured, and the course of economic activity. Our markets and institutions are too complicated to be finely tuned by one or more controlling levers.

When the Federal Open Market Committee met in January 1970, it was apparent that the economy as a whole had leveled off.

Declines were occurring in some sectors, particularly housing and defense, but prices were continuing to rise at a rapid pace. In accord with this understanding, the FOMC communicated to the “desk” at the Federal Reserve Bank of New York, which conducts open market operations in government securities for the entire System, its “desire to see a modest growth in money and bank credit . . .”¹ as its paramount objective. In February 1970, this directive

was strengthened to read “moderate growth of money and bank credit . . .”²

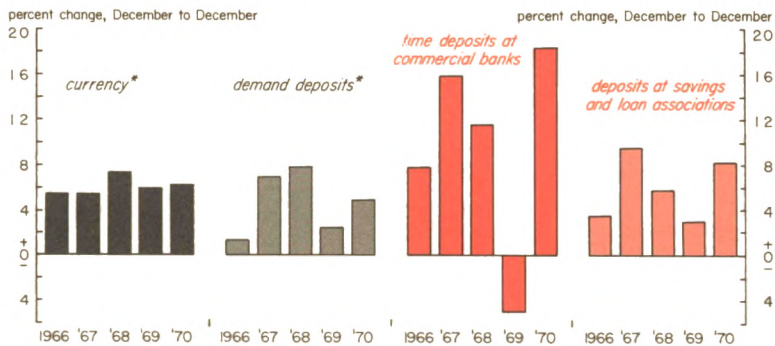
I will not take time here to review all of the steps taken by the System to encourage growth of money and credit in 1970. Aside from open market operations, Federal Reserve actions included reductions in the discount rate, cuts in margin requirements on stock purchases, adjustments of reserve requirements, and liberalization of the rates commercial banks can pay on time deposits. Rather, I shall emphasize the quantitative evidence of the year-long trend to easier monetary and credit conditions.

In the week ending January 27, 1971, Federal Reserve credit outstanding averaged \$66.6 billion, up almost \$5 billion from a year earlier—an increase of 8 percent. Sys-

¹See “Record of Policy Actions of the Federal Open Market Committee,” **Federal Reserve Bulletin**, April 1970.

²*Ibid.*, May 1970.

Large increases occurred in the public holdings of liquid assets



*Currency plus demand deposits in the hands of the public equals the “money stock.”

tem holdings of government securities, which account for the lion’s share of reserve bank credit, were up \$6.3 billion, or 11 percent. Member bank borrowings, also included in reserve bank credit, were less than \$400 million, only one-third as large as a year earlier. The lower level of borrowings, of course, reflects reduced reserve pressures on banks. On the other side of the System’s balance sheet, Federal Reserve notes (which now account for virtually all of the nation’s paper currency) were up 7 percent. Member bank reserves rose 6 percent. These reserves, “high-powered dollars,” provide the base for expansion, not only of commercial bank credit, but the entire financial structure of the nation.

Increasingly, the rate of change in the money stock (defined narrowly as currency and demand deposits in the hands of the public—“M₁”) is used as a symbol for the overall thrust of monetary policy. This is

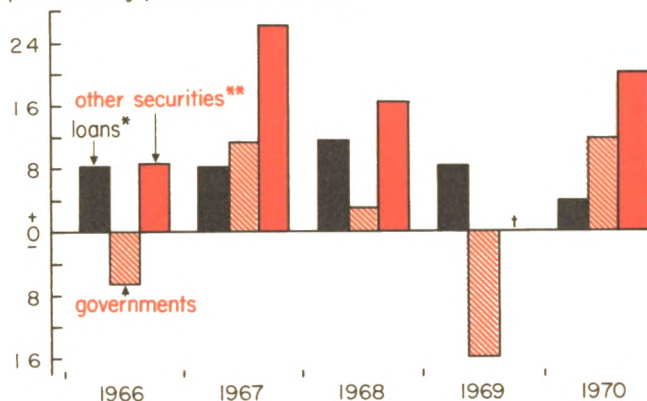
sometimes termed “the Friedman effect.” In December, the money supply was \$215 billion (seasonally adjusted, daily average basis), up 5.4 percent from a year earlier. This increase compares with a 3.1 percent rise in 1969 (with practically no increase in the second half of that year). The rise in the money stock in 1970 was less than in 1967 or 1968, but *it was larger than in any previous post-World War II year, except 1951.*

Useful as the money stock concept may be as an analytical tool, it must be remembered that it is not only overly simplified, but it is also a heterogeneous quantity. For example, the past decade has witnessed a substantially greater proportional rise in currency outstanding than in demand deposits, for reasons that are not completely clear. In individual years, however, demand deposits have increased faster than currency. Within the currency component, for example, the rise in \$100 bills in the past decade has been twice the rise for the total money stock. At present, almost \$12 billion worth of \$100 bills are outstanding. Note, I do not say in “circulation” because some of these bills apparently are held as a store of value. There are almost 120 million hundred dollar bills outstanding, but there probably are none at all in the wallets of this audience!

You might also be interested in the fact that about \$6 billion of coin is now outstanding—about \$30 in change for each person in the United States. Again, I doubt if anyone in the audience is that “loaded.” Coins outstanding increased four times as fast as the total money stock in the past decade. The Kennedy half dollars are one factor. From

Commercial banks expanded investments in 1970 as loan demand eased

percent change, December to December



*Adjusted for loan sales.

**Mainly municipals.

†No change.

1964 through 1969, almost 1.3 billion Kennedy halves were coined and issued, about as many half dollars as had been issued in the entire period of U. S. coinage from 1792 through 1963. About 10 percent of the Kennedy halves were issued through the Federal Reserve Bank of Chicago. Unlike the earlier Franklin halves, they seldom come back to us for recirculation. Simple arithmetic tells us that six Kennedy halves have been issued for every man, woman, and child in the United States. (I know many have gone abroad.) Very soon the public’s appetite for Eisenhower dollars is to be tested.

Demand deposits account for more than three-fourths of the money stock. It is often said that 90 percent of all transactions are made by check. But that is only a wild guess. Probably by far the largest share of purchases, certainly business purchases, are made on credit and are settled later by check. But quantification is impossible on the basis of

present knowledge.

A substantial share of all demand deposits is represented by compensating balances in banks, held to reimburse these banks for services rendered. We do not know the total amount of compensating balances, how strictly requirements are enforced, or the extent to which these arrangements vary with changes in credit conditions. But compensating balances are part of the money stock, often referred to as the "active money supply." At the other end of the spectrum are the overdraft arrangements now offered by many banks. Individuals are encouraged by those banks to keep their demand balances in the red. The money stock of people using such arrangements is negative.

Sometimes commercial bank time accounts are included in a broader concept of the money stock, commonly referred to as "M₂." The usefulness of this concept has been undermined by the rapid development and recent sharp fluctuations in the negotiable certificates of deposits issued by large banks.

New security flotations reached record levels in 1970



From an investor's standpoint, certificates of deposit (CDs) are closely akin to other liquid assets such as Treasury bills or commercial paper. In 1969, total time and savings deposits of commercial banks declined 5 percent, mainly because banks were prevented by Regulation Q ceilings from paying competitive market rates for CD money. Because restrictions were eased in 1970, and because short-term market rates declined sharply, the rebound in time and savings accounts was dramatic. For 1970 as a whole, commercial bank time and savings accounts were up more than 18 percent, a record increase. The recovery in outstanding CDs was augmented by an upsurge in other time and savings accounts.

Deposits at savings and loan associations rose 8 percent in 1970, compared to 3 percent in the previous year. The \$11 billion rise in S&L deposits set a new record. Deposits of mutual savings banks, important in the East, rose 7 percent in 1970, compared to 4 percent in the previous year. At most banks and other savings institutions, inflows of time and savings funds were especially strong in the final months of 1970. Apparently, this trend continued in January 1971.

The more rapid increase in deposits of financial institutions in 1970 was accompanied by comparable increases in their earning assets. In the case of commercial banks, total loans and investments (adjusted for sales of loans to affiliates) increased 7.4 percent last year, almost twice as much as in 1969. Loan demand was very weak in the final quarter of the year partly because of the slower pace of the economy and the auto strike, but primarily because of refundings of loans through sales of securities. For the year as a whole, bank loans rose less than 4 percent, compared to a 10 percent rise in 1969. But bank holdings of governments and mu-

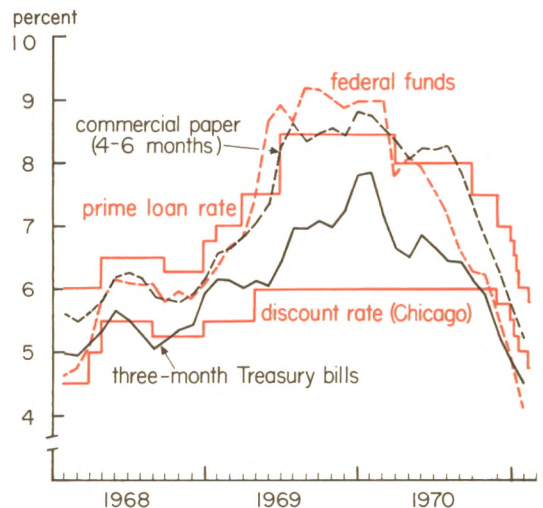
nicipals rose 12 and 20 percent, respectively, in 1970. In 1969, banks liquidated 16 percent of their governments, and merely maintained holdings of municipals, to help them to accommodate heavy loan demand.

Most of the increase in deposits at S&Ls, and half of the increase in deposits at mutual savings banks, were reflected in larger holdings of mortgage loans. Resources of S&Ls in 1970 were supplemented by a rise in borrowings from the Federal Home Loan banks. (Under similar circumstances in 1967, borrowings from the Home Loan Banks declined). The improvement in the lending power of thrift institutions contributed to the sharp uptrend in housing starts in the second half of 1970.

As you all know, the securities markets absorbed an enormous volume of new issues in 1970. Despite especially heavy flotations in the fourth quarter, long-term interest rates declined significantly late in the year.

New corporate capital issues, more than 70 percent nonconvertible bonds, totaled almost \$39 billion last year, up 45 percent from the record total of 1969. New issues of long-term municipals rose 50 percent to \$18 billion, a total that exceeds the 1968 record. Thus far in 1971, offerings of both corporate and municipal securities have substantially exceeded the levels of early 1970. The large volume of corporate securities sold in 1970 helped to improve the balance sheet liquidity ratios of many firms. It now appears that the long-term decline in the ratio of corporate liquid assets to short-term liabilities was halted and reversed last year. Unfortunately, the available data on corporate holdings of liquid assets leave much to be desired. A recent survey of business holdings of liquid assets is currently being evaluated by statisticians at the SEC. Hopefully, the information developed will shed needed light on this sector.

Short-term rates have declined sharply since early 1970



Note: Latest data plotted February 1971.

Attempts to analyze the various aspects of the financial markets often lead one to wander through the trees looking for the forest. Fortunately, the staff of the Board of Governors of the Federal Reserve System constructs a body of data, under the heading the "Flow of Funds," that relates the national income accounts to developments in the financial sectors of the economy. Estimates of financial flows—funds raised and funds invested—are not yet available for the fourth quarter of 1970. Nevertheless, data for the first three quarters of the year provide an instructive overview of financial developments in the crucial period under review.

Total funds raised by the nonfinancial sectors of the economy (i.e., excluding intermediaries), both public and private, totaled \$88 billion in 1969, down from \$97 billion in 1968. The peak quarterly rate for this aggregate in 1969, \$93 billion, was reached in

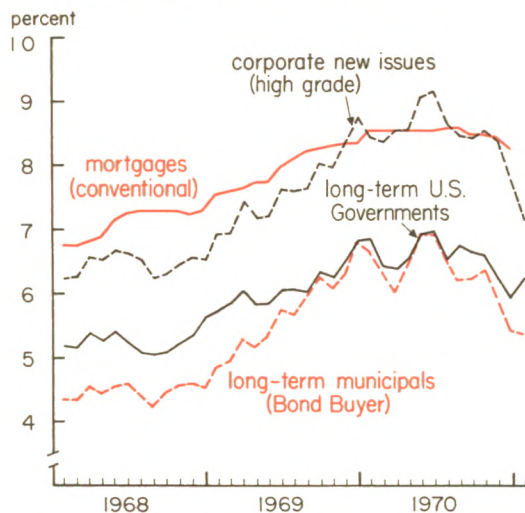
the third quarter, coincident with the peak of business activity.

Total funds raised by the nonfinancial sectors declined to an annual rate of \$80 billion in the first quarter of 1970. In the second quarter, however, the rate jumped to more than \$100 billion, and it reached \$103 billion in the third quarter. Except for the effects of the GM strike, this extremely high rate of financing probably continued in the fourth quarter of last year.

In the 1969-70 period, the most pronounced shift in the Flow of Funds reflected the shift in the federal sector. From a surplus in the first half of 1969, the federal government moved to a deficit, mainly because of reduced revenues, at a \$19 billion annual rate in the third quarter of 1970. One does not have to be identified either as a "monetarist" or as a "fiscalist" to foresee an expansion in business activity in 1971.

A review of the course of interest rates in the past year suggests, once again, the need

Long-term rates also declined but less rapidly than short rates



Note: Latest data plotted January 1971.

for caution concerning generalization in this area. Short-term rates declined through most of 1970, but long-term rates reached peaks about midyear. The rate on three-month Treasury bills, the nearest market approximation to a "pure" interest rate, was at an all-time high of 8 percent at the start of 1970. By late January 1971, the bill rate had declined to 4.2 percent—the lowest since mid-1967. The drop in the rate banks pay to borrow each other's excess reserves—the federal funds rate—was even sharper, from 9 percent to less than 4 percent. Commercial paper rates, at 8 percent as recently as last summer, are now below 5 percent. Commercial banks have cut their prime rate from 8.5 percent in February 1970 to 6 percent currently, with an unprecedented flurry of reductions since last September. Rates on new issues of high-grade corporate bonds dropped from 9.2 percent last June to about 7.5 percent in late January.

Interest rates are the price of credit and reflect, like other prices, the interaction of supply and demand. In recent months, most of the downward pressure apparently has come from the supply side, because the total volume of funds raised has been large. But one should not assume that the monetary authorities can determine the course of interest rates through long periods of time. Unlike prices of goods, the price of credit cannot be forced down indefinitely by increasing the supply. Because of price inflation, lenders demand, and borrowers are willing to pay, a premium to compensate for erosion of the purchasing power of the dollar.

You may have noted that in this discussion of liquidity I have made only passing reference to ratios that purport to measure liquidity in an objective sense. This is because I regard liquidity more as a state of mind than a concept subject to quantification. Liquidity

is ample when an individual, business, or institution is confident that funds will be available to pay bills when they come due. Current and prospective income, the collection rate on receivables, and the extent of unused lines of credit are all important considerations. A man with a substantial bank account who thinks his job is in jeopardy is less willing to spend and to assume new commitments (feels less liquid) than a man with a negative bank balance who has just been promoted.

The shock to the confidence of many individuals administered by the recession of 1969-70 (mild perhaps, but recession nonetheless) has had far more to do with the erosion of liquidity than changes in any financial aggregates. The psychological impact of the recent business decline, I believe, was more severe than in any of the previous post-war recessions, each of which featured much larger declines in activity and employment. Partly, this is because the balloon of endless expansion inflated in the 1965-68 period has burst. Partly, it is the drop in the stock market, the Penn Central failure, and the problems of the brokerage industry—problems which many of you are all too aware of. Partly, it is the persistence of inflation in the face of lower profits and slower growth in personal incomes.

Confidence will be rejuvenated only when it becomes evident that a pronounced recovery in business activity is underway. There are encouraging signs that such evidence is near at hand. Residential construction activity is extremely vigorous. Retail sales improved in December and January. The end of the auto strike has revived affected sectors of that industry. Total employment ceased to decline in late 1970, and probably is rising in early 1971. Personal income continued to rise quarter-to-quarter through the slowdown

in activity. Consumers have been saving at historically high rates. The growth of liquid assets, and the availability of consumer credit, indicate that the potential to spend is very large. The consumer is the real key to sound economic revival in 1971.

Earlier in my talk I described the financial developments that have laid the foundations for a return to prosperity. Most of us are disappointed that clearer signs of an improvement in economic conditions have not already appeared. The fact that there are lags between monetary policy actions and their effects is well known. But the timing of the lags is still somewhat unpredictable. The lags apparently are longer this time—certainly longer than in 1967 when the slowdown in activity was reversed within six months.

Disappointment with the results of monetary policy thus far must not lead to incautious excesses that may be harmful rather than beneficial to economic recovery. An even sharper increase in the growth of money and credit at this time will not quickly revive the nation's depressed psychology which is already on the mend. That will take time. The available funds are there today. And if credit unavailability is threatening to hamper recovery, you can be sure that the monetary authorities will act swiftly and surely.

Each of us could draw up a list of episodes of the 1969-70 period that might be recalled as harbingers of disaster if the economic adjustment had snowballed into a deeper recession. The fact that such a prospect was not realized bears testimony to the basic strength of our business and financial structure. With a proper balance of fiscal and monetary policies, plus responsible union and management policies in industry, I firmly believe that the Seventies will go down as the greatest decade in American history.

The value added tax in Europe

The value added tax has attracted widespread interest in recent years but it is not a new fiscal concept. For more than half a century economists have discussed the pros and cons of the "value added tax" (commonly referred to as VAT). In one form or another, value added taxes have been in operation since the mid-1950s. A value added tax is a tax applied to the increase in value of goods and services arising from each stage of the production and distribution process.

France, in 1954, became the first Western European nation to impose a value added tax, although it was of limited coverage. In recent years, a number of other European countries either have adopted such taxes or have considered doing so.

The member nations of the Common Market—officially termed the European Economic Community (EEC)—agreed to adopt value added taxes in 1967. These nations—Belgium, France, Italy, Luxembourg, the Netherlands, and West Germany—now either have value added taxes in effect, or are scheduled to levy such taxes in the near future. Outside the Common Market, value added taxes are now used in Denmark, Norway, and Sweden. Austria and Finland are actively considering such taxes. If Ireland and the United Kingdom join the Common Market these nations presumably would be required to adopt the value added tax as a condition

of membership.

Effective standardization of the tax structures of the Common Market countries would be a major step toward economic integration. Other steps taken toward this goal include the removal of trade barriers among members, the adoption of a common agricultural policy, and an agreement to work toward a common currency.

How the tax works

Value added taxes usually are proposed as substitutes for sales or income taxes. Proponents of the value added tax maintain that it is easier to calculate, harder to evade, and more "neutral" than alternative taxes.

The value added by a firm to the products it sells is equal to all of the expenses it incurs other than the cost of purchased goods. Expenses include outlays on wages, rents, depreciation, and profits. The value added by a firm, therefore, is obtained by subtracting the cost of purchased goods from total sales. For an extractive industry such as coal mining, value added is a very large proportion of sales, while for a retailer value added is a relatively small proportion of sales. For manufacturers, this proportion varies substantially, depending in part on the extent to which the firm is integrated, i.e., producing rather than purchasing components.

Increments of value provided by business

firms in the chain of production and distribution add up to the price of the product to a final purchaser. Theoretically, a 10 percent sales tax levied on a product sold to a consumer is equal to a 10 percent value added tax levied on each of the transactions through which the product passes.

In contrast to the income tax—with deductions, exemptions, and all of the accounting problems involved in determining net income—the value added tax is easy to calculate, both by the taxpayer and the tax collector. Unlike multi-stage sales or turnover taxes levied at various stages, the value added tax does not impose “a tax on a tax,” i.e., on taxes already incorporated in the price of a product. If the value added tax is a substitute for other taxes, it is a simple matter to determine the total tax incorporated in the selling price of a product, and such taxes can be rebated for exports if such a course is deemed desirable.

The structural neutrality of the value added tax, compared with multi-stage or turnover taxes, is best illustrated by an industry in which some competitors are more integrated than others. In such cases, a tax on sales of manufacturers, including sales of one manufacturer to another, bears more heavily on the firms that purchase a relatively large share of their components.

In practice, the value added tax is seldom employed in a “pure” form, nor is it the only tax imposed. Among the European nations now using this tax, its share of total revenues varies from 20 to 40 percent. Moreover, in some countries certain industries, or certain types of production—such as retail trade or the sale of services—are not taxed or are taxed at different rates. For example, luxury goods may be taxed more heavily than essentials, and professional services may be exempt.

Why the value added tax?

A leading reason for the EEC’s adoption of the VAT as a replacement for a wide array of turnover and sales taxes was that it facilitates tax adjustments on goods crossing international borders. According to rules set down by the General Agreements on Tariffs and Trade (GATT), indirect taxes on goods imported and exported, such as a VAT or turnover tax, or wholesale and retail sales taxes, are eligible for border tax adjustments. Border tax adjustments are not allowed on direct taxes, such as income or profits taxes. This means that a country with a VAT may impose on imports a tax equivalent to the tax on domestically produced goods, and that exporters may receive a tax credit for indirect taxes paid on exported goods. Thus, exports move across national borders free of the indirect tax, while imports compete with domestic goods with the same indirect tax burden.

Most European countries that now levy a value added tax have substituted this tax for turnover or “cascade” taxes, or other wholesale and retail sales taxes. Countries planning to adopt the VAT will no doubt do the same. In all cases, the replaced taxes were indirect taxes for which border adjustments are allowed under the GATT agreement.

The amount of the tax liability on the VAT is not hidden as in the case of most sales taxes, other than those imposed solely at the final or the retail stage. Recorded at each production stage, the amount of tax credit to be allowed for exported goods and the amount of the tax to be imposed on imported goods are easily determined.

Firms at any stage of production are liable for the VAT on the total value of the product. But each firm is permitted to deduct taxes paid previously. The liability is only on the firm’s specific contribution to the value of the

product. It is, therefore, in the interest of every producer to make certain that the tax liability incurred at earlier stages was paid. Otherwise, he is liable. In this way, business firms should help prevent tax evasion.

The European record

Since the 1967 agreement to establish the value added tax in all Common Market countries, substantial progress has been achieved. France expanded the coverage of its value added tax in 1968. The tax became effective in Germany the same year. The Netherlands followed in 1969, and Luxembourg in 1970. The EEC Council granted Belgium an extension for compliance to 1971, and Italy to 1972.

British officials made two formal studies of the value added tax in the 1960s. The Richardson Committee, reporting in 1964,

recommended against adoption of the value added tax. In 1969, however, an official report discussed advantages and disadvantages, but did not make a recommendation.

Experience with the value added tax in Europe covers a relatively short time span. Even in France, coverage did not include all of the production chain, including retailing and the sale of many services, until 1968. On a broad scale, therefore, the value added tax has been in effect for only about three years.

Adoption of the value added tax by Common Market nations is but one step toward the standardization of tax structures. In addition, a major objective of the EEC nations in adopting the value added tax was to ease the administrative difficulties of indirect tax border adjustments. Apparently, this has been successful. The overall objective of harmonizing the tax structure within the

Common Market, however, remains far in the future. Some countries have a single VAT rate while others have two or three, or more. Exempted industries differ from country to country. Even if the value added taxes were uniform differences in excise taxes and taxes on income, profits, and property would remain.

Lessons for the United States?

European experience with value added taxes is being followed with interest by ob-

National governments rely on numerous sources of income—VAT is but one

	France 1968	Italy 1969	The Netherlands 1970 estimate	Norway 1970 estimate	United Kingdom 1968	West Germany 1968
	(percent)					
Income and other direct taxes on households and corporations	30	29	55	13	38	56
Value added taxes and turnover taxes	41	19	23	46	*	36
Other indirect taxes	12	8	4	22	*	
Import duties	2	26	9	2	29	*
Excise taxes	*		5	*		*
Other revenues	15	17	3	17	33	8
	100	100	100	100	100	100

*The category, if applicable, is included in "other revenues."

Note: Totals may not add to 100 due to rounding.

SOURCE: Compiled from *Statistical Yearbook, 1969*, United Nations.

servers in the United States. This is partly because such taxes have been advocated for the state and federal governments of this country, but also because tax structures of nations exert influence on the pricing of goods and services in world markets. In the judgment of some observers, American exporters are at a disadvantage in world markets because the corporate income tax, which they bear, may not be abated on the business that they do in the export trade. Their foreign trade rivals, by contrast, are relieved of VAT liability on international transac-

tions. Substitution of a VAT for the present corporate income tax in the United States is a proposal, therefore, that has won widespread support.

Exploration of the VAT as a supplemental source of federal revenue also has been advocated. The substantial obligations likely to be incurred in the national effort to deal with environmental deterioration as well as under pending proposals for welfare reform and revenue sharing strongly suggest that the government's revenue resources will remain under strain for a considerable time ahead.

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