

an economic review by the Federal Reserve Bank of Chicago



Business Conditions

**Economic growth
strains capacity**

Banking developments

***april*
1973**

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Rapidly rising demand has pushed output in many sectors to the limits of capacity. Bottlenecks and shortages have replaced last year's "excess capacity." The United States again faces the basic problem of elementary economics—allocation of scarce resources to insatiable human wants.

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Economic growth strains capacity

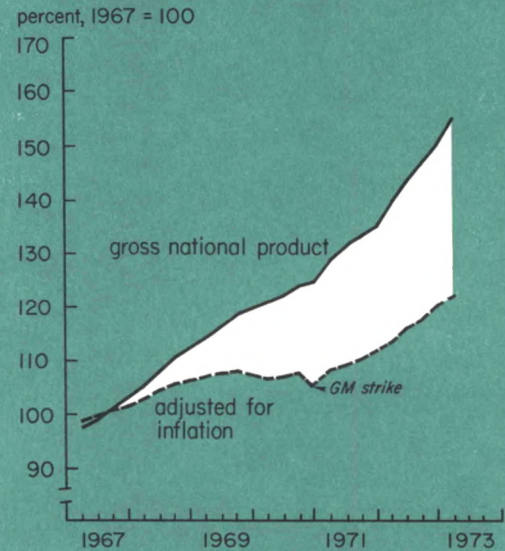
The experience of economy-watchers in the 1970s resembles that of parents whose child is slow learning to talk. When he finally does talk the torrent of words is hard to control.

Through 1970 and 1971, even as late as the spring of 1972, there was widespread impatience with the sluggishness of the business recovery. In recent months, a very different environment has developed. Concern now centers on the question: Will sufficient resources be available to satisfy surging demands without generating a rapid acceleration of general price inflation?

In the first quarter of 1972, margins of unused resources, both facilities and manpower, appeared adequate to accommodate a long and sizable uptrend in sales and output. The national unemployment rate seemed stuck at nearly 6 percent (compared to 3.4 percent in early 1969). Only 75 percent of the nation's manufacturing facilities were estimated to be utilized (compared to 88 percent in early 1969). Price and wage controls aided by competitive forces appeared to have dampened the wage-price spiral.

Starting in the second quarter of 1972, the uptrend in sales and output gained speed. Since then, virtually all sectors of the economy have shown significant gains. Vigorous expansion continued through the first quarter of 1973. Current estimates show the total unemployment rate down to 5 percent, and the overall rate of plant utilization in excess of 80 percent. But these statistics fail to reflect the extent of the change in supply-demand relationships that has occurred in the past year. In many sectors, operations are at, or very close to, effective capacity.

Rapid growth in GNP has continued for two years



Spokesmen for such basic industries as motor vehicles, steel, machine tools, lumber, oil, paper, and rail transport report that their facilities are fully utilized. Throughout the economy, certain vital materials and components are in short supply, and availability of skilled manpower is limited in many centers. Delivery times on new orders have stretched out markedly, especially for the durable goods that are so important in the Midwest.

Although hampered by bottlenecks, prospects for further expansion of activity in the months ahead appear excellent. After-tax incomes of individuals and corporations are rising rapidly. The upswing in expenditures on new plant and equipment appears to be gathering strength. Inven-

tories of finished goods, although rising rapidly in recent months, remain low by historical standards relative to sales and income. As in earlier periods of high-level prosperity, the United States again faces the basic problem posed in elementary courses on economics—allocation of scarce resources to insatiable human wants.

An accelerating expansion

In the first quarter of 1973, total spending on goods and services (the gross national product) was at an annual rate of about \$1,230 billion, up 11 percent from a year earlier. Real GNP, adjusted for price inflation, was up about 7.5 percent in this comparison—one of the most rapid expansions since the Korean War. From the sluggish first quarter of 1971 to the first quarter of 1972, real GNP rose 4.7 percent.

In March 1973, total wage and salary employment totaled 74.9 million—up 2.9 million, or 4 percent, from a year earlier. This was about double the increase

in the previous 12-month period. Manufacturing employment at 19.6 million in March was up 5 percent from a year earlier, whereas there had been very little growth in manufacturing employment from March 1971 to March 1972. Most states of the Midwest have matched national employment gains in the past year.

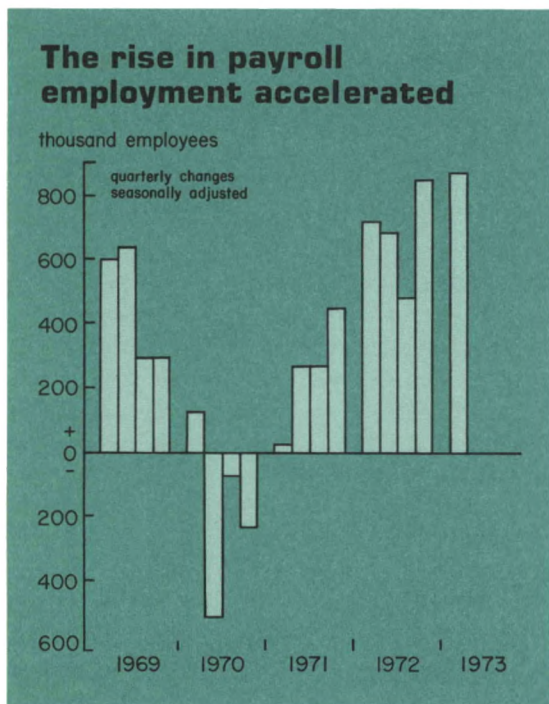
Manufacturing activity has risen much faster than the rest of the economy in the past year, and much faster than manufacturing employment. Measured by the Federal Reserve Board index, the physical volume of total manufacturing output in February was up more than 10 percent from February 1972. In the previous 12 months, the rise was only 4 percent. Durable goods output was up 13 percent above the year-earlier level, after rising only 3 percent in the previous 12 months.

The star performers among manufacturing industries in the year ending in February were motor vehicles, up 21 percent; steel, up 17 percent; and capital equipment, up 15 percent. Each of these output comparisons are based on physical measures, unaffected by price inflation.

In some producer goods industries, the upsurge in business has been spectacular, although often from a severely depressed base. The dollar value of shipments of metal-cutting machine tools in January and February was up 60 percent from a year earlier, and new orders were up 130 percent. Despite the increase in machine tool shipments, dollar volume was still far short of the levels of the late 1960s. Other capital goods industries reporting sharply increased activity after a dry spell include farm machinery, shipbuilding, and commercial aircraft. Some firms in these industries are experiencing difficulty rebuilding staffs of skilled workmen, depleted by layoffs when business was slow.

Consumers spend freely

Purchases of goods and services by



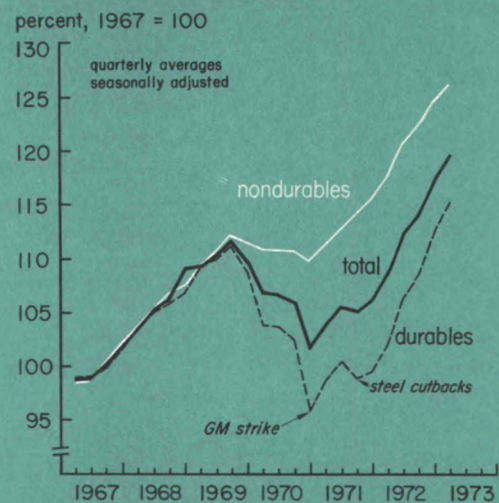
consumers have accounted for 63 percent of GNP, and outlays on residential construction for an additional 5 percent in recent years. More than two-thirds of total output, as a result, goes directly to satisfy consumer wants. Moreover, a large share of business investment in inventories and plant and equipment represents efforts to supply the consumer sector. Trends in consumer purchases obviously go a long way toward determining the course of total economic activity.

Last year, after-tax income of individuals rose 6.8 percent, while consumer purchases of goods and services increased 8.4 percent. (The rise in after-tax income was held down last year by "overwithholding" of federal income taxes.) As a result, the savings rate—the proportion of income not spent on consumption—declined from the abnormally high rate of 8.2 percent in 1971 to 6.9 percent last year. The rise in consumption spending was aided by a record increase in consumer instalment credit. Outlays on residential construction rose 27 percent in 1972, far more than other major sectors.

The surge in consumer spending has continued into 1973. Last year, sales of all retail stores were 10 percent above sales in 1971. In the first quarter of 1973, retail sales were about 14 percent higher than the level of a year earlier. Sales of durable goods stores were up more than 20 percent, while sales of nondurable goods stores were up about 11 percent in the recent period.

Autos are the largest consumer good purchased by most families. Strength in this sector reflects rising incomes, confidence, and the availability of instalment credit. Sales of auto dealers led the rise in retail sales both in 1972 and in early 1973. Many auto dealers have reported that their sales would have been even higher if their inventories had been larger. At the beginning of March, auto inventories were at the lowest level relative to sales in eight years. For the calendar year 1973, sales of autos

Manufacturing output has zoomed since 1971



(imports included) are expected by industry experts to total \$11.5 million, up from last year's record \$10.9 million. To meet demand, auto firms have added overtime, extended projected model runs, and reactivated idle or underutilized plants.

Sales of household appliances, television sets, and recreational equipment thus far in 1973 have continued at last year's advanced pace. Sales of clothing stores have shown even greater year-to-year gains in the first quarter than they did in 1972.

Housing starts are generally expected to decline significantly in 1973 from the unprecedented 2.36 million starts in 1972. Most forecasts are in the 2 to 2.2 million range. This would about equal the 1971 total of 2.1 million, which exceeded all previous years by a substantial margin. Whatever the outcome for the year, January-February housing starts were about equal to year-earlier levels, and new permits were appreciably higher. A wide range of building materials continued to be in very short supply. Mobile home shipments, not in-

cluded in housing starts, were up substantially from last year's high level in early 1973.

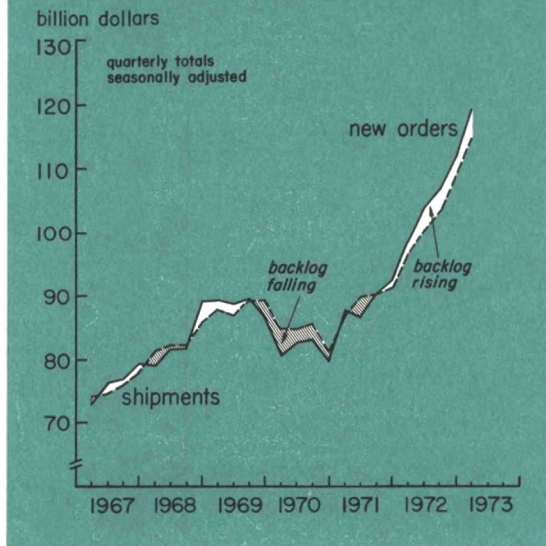
Consumer expenditures led the economy to prosperity in 1972. It appears that the increase in total consumer expenditures in 1973 will be even larger than last year's rise, without straining buying power. After-tax income is almost certain to grow at a faster rate in 1973 than in 1972. Increased employment, larger pay boosts, higher social security payments, and a probable reduction in the amount of over-withholding of personal income taxes on wage and salary income will contribute to higher spendable income. Instalment credit continues to be readily available.

Orders and lead times

Shipments and new orders of durable goods manufacturers have increased steadily since the third quarter of 1971. ("Durable goods" consist of items made of wood, metal, stone, clay, and glass, and are not necessarily "long-lasting.") Because new orders have exceeded shipments, order backlogs have increased almost every month in this period. Higher backlogs, in themselves, suggest pressure on capacity. In addition, in the past six months, more and more manufacturers have been quoting longer lead times on new orders. In some cases, new business has been discouraged through allocations or "controlled order acceptance" to give priority to established customers.

Any analysis of trends in unfilled orders centers on durable goods manufacturing because most nondurable goods manufacturers (and some durable goods firms as well) fill orders from stock or current production. Typically, industries that do not have a significant volume of unfilled orders negotiate "blanket orders," with goods shipped upon notice under contractual or semicontractual arrangements that are not counted as backlogs.

Durable goods manufacturers' orders have outpaced shipments



In January and February 1973, shipments of all durable goods manufacturers were 20 percent above last year's level, while new orders were up 22 percent. Mounting month by month, order backlogs of all durable goods manufacturers were 18 percent above last year at the end of February. For primary metals, including steel, backlogs were up 50 percent in February. Backlogs for nonmilitary capital equipment were up 22 percent. Backlogs for military equipment, sharply reduced in recent years, were up 13 percent from last year.

Order lead times on major equipment such as electrical generators, ships, and rolling mills may extend two to three years, even in normal times, because these custom-built items are large and complicated and may be specially-designed. At the other extreme, suppliers of relatively small parts and components attempt to keep as current as possible and may sell "off-the-shelf." Lead times have lengthened on virtually all durable goods in recent

months, and in many instances purchasers accustomed to immediate delivery have been told they would have to wait. Clearly, such developments tend to cumulate as orders are placed at multiple sources to assure adequate supplies.

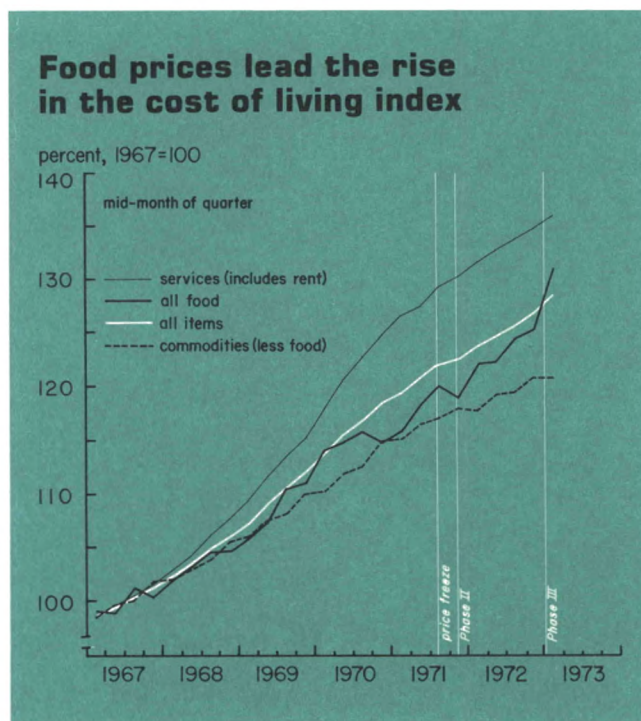
Since early 1972, the monthly survey published by Purchasing Managers' Association of Chicago (PMAC) has shown a growing share of the reporting firms with larger output and employment, higher new orders, and rising order backlogs. The purchasing managers also evaluate supplier performance. In February 1972, 15 percent of the members of the PMAC reported that deliveries were faster than in the previous month, while only 11 percent reported slower deliveries. Since then, the balance has swung heavily to the other side. In February 1973, 71 percent of the PMAC members reported slower deliveries, while only 2 percent reported faster deliveries. In the past 20 years, the current concern with slower deliveries was approximated only for a two-month period early in 1966. Purchasing managers also have reported cases of deteriorating quality, as suppliers have attempted to boost production by adding overtime and new employees and by pushing the use of facilities above optimum levels. The Chicago experience has been duplicated in Milwaukee and other centers.

Price developments clouded

When demand rises rapidly relative to supply, market conditions always are reflected, more or less clearly, in higher prices. Not all price changes are recorded in published quotations or official price indexes. Adjustments in discounts and premiums, charges for freight and special services, and shifts in grades and specifications often cloud the picture. But many price

changes are readily apparent. Every household is familiar with recent sharp increases in prices of meats and other foods. Similarly, price increases for many industrial materials, some not under control, have been very large and well-publicized.

Lumber and plywood prices in March were 20-50 percent above last year, and there were reports of individual deals at even higher prices. In mid-March, selected "spot commodity" prices of industrial raw materials showed the following increases from a year earlier: steel scrap, up 30 percent; tin, 16 percent; zinc, 14 percent; copper scrap, 13 percent; print cloth, 44 percent; wool, 150 percent; hides, 112 percent; and rubber, 49 percent. The surge in spot commodity prices in the past year has not been exceeded since the first year of the Korean War. Most industrial raw materials are traded in relatively free markets, and are affected by world economic conditions. Industrial expansion in the United States in the past year has been paralleled



in varying degrees in virtually all other industrialized nations. In many cases, these nations are competing for supplies in world markets with U. S. buyers.

In markets for finished goods, prices have increased much less than in the commodity markets. Excluding foods, prices of finished consumer goods were up only 3 percent from a year ago in February, according to the wholesale price index published by the Bureau of Labor Statistics. Average prices of machinery and equipment were estimated to be up only 2 percent in this comparison.

Even in the absence of price controls, prices of finished manufactured goods usually are "stickier" than prices of volatile raw materials. Finished goods prices typically are administered or negotiated with an eye on competitors. Moreover, in the

past year, the rise in labor cost per unit of output has been modest, mainly because of substantial increases in output per man-hour. With labor costs per unit of output under a fair degree of control and with profits rising sharply, manufacturers of finished goods have not been under pressure to raise prices, at least they could not justify large increases to the Price Commission.

Despite the relaxation of price controls under Phase III as promulgated on January 11, large firms, which account for the great bulk of the manufacture of finished durable goods, have continued to exercise great caution in raising selling prices. There have been complaints, however, that many small businesses that supply parts or components have considered themselves substantially free of controls since mid-January.

Bottlenecks and shortages

Building materials and various fixtures for residential buildings were in short supply throughout 1972, and shortages delayed completions of new housing units in some areas. Lumber, plywood, hard board, gypsum board, bricks, cement, insulating materials, and plumbing fixtures were allocated to distributors. Output schedules for building materials remained high through last winter's off-season in an attempt to build adequate inventories for the spring upswing in building.

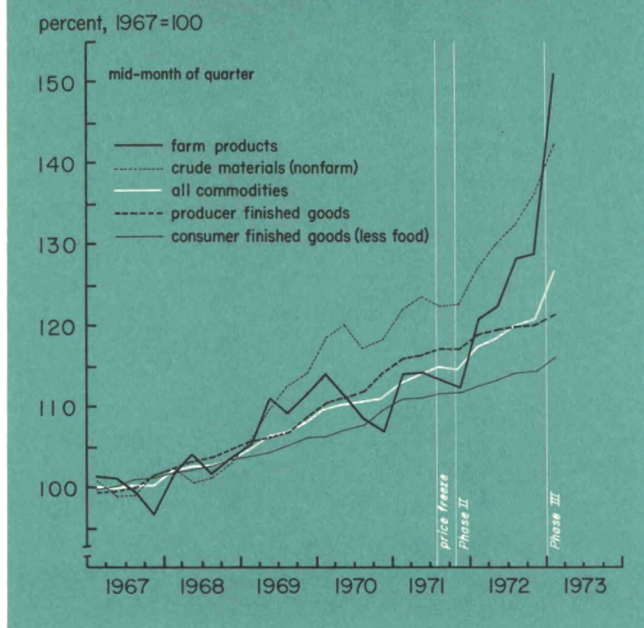
Motor truck output totaled a record 2.5 million in 1972. But truck sales would have been still higher if producers had been able to increase output further. Truck output was not limited by final assembly operations in most cases, but by availability of key components—especially diesel engines and axles. The truck boom has continued into the early months of 1973. Waiting times on certain models of heavy trucks extend several months ahead.

In the past six months, a widening range of finished goods has been reported in short supply. The list now includes certain classes of farm machinery, construction equipment, machine tools, furniture, natural gas, petroleum products, paper products, and textiles.

As in the case of trucks, most of the capacity problems in finished goods industries relate to shortages of components rather than limitations of assembly lines. Doubtless, the most frequently reported shortage item is castings, with forgings and metal fasteners close behind. Some buyers say that supply problems for such items are the worst they have known since the Korean War or even World War II. At subsequent stages of fabrication, manufacturers find they must place orders well in advance for gears, bearings, and electrical components, including electric motors.

Some plants have reduced schedules of output of finished machinery and equip-

Wholesale prices of finished goods have increased only moderately



ment in order to “let our suppliers catch up with us.” Before equipment can be delivered, it must be completely finished and tested. Not only major components, but nuts and bolts must be in place. In short, capacity to produce any finished good is limited by capacity to produce each part.

The case of steel

Probably the most striking of the changes in supply-demand relationships in the past year has occurred in steel, perhaps the most important basic commodity in industrialized economies. At the start of this year, shipments of steel from U.S. mills were expected to rise to 96 million tons in 1973, up from 92 million tons in 1972, topping the record 94 million tons shipped in 1969. In late March, analysts were projecting first-half shipments at almost 55 million tons, and estimates for the year were being raised to at least 103 million tons.

For the past 15 years, steel has been in almost chronic oversupply except for periods of “strike-hedge” inventory buildups, and U.S. producers have been disturbed by substantial imports of steel from Japan and Western Europe. This year, a large portion of the steel industry’s facilities are fully utilized, and imports are providing a needed supplement to support consumption.

U.S. consumption of steel is expected to exceed 110 million tons in 1973. Approximately 3 million tons of U.S. steel may again be exported as in the past two years. Another source of demand may be additions to manufacturers’ inventories, which have been low relative to consumption.

Demand for steel has been strongest in the case of hot and cold rolled sheet, used in especially large volume by the motor vehicle industry. The normal five-week lead time on orders for sheet has stretched to ten to 12 weeks or more in recent months. Demand for wire and bars is also vigorous. Most producers, however, indicate they could supply additional steel plates and heavy structurals.

Industry sources indicate that the major bottleneck in the steel production process is not production of hot metal at one end, or in finishing operations at the other, but in the middle stages of semi-finishing operations. However, interest has developed in the question as to whether ingot or “raw steel” output, at an annual rate of 155 million tons in late March, was close to maximum. (Shipments of steel are about 70 percent of raw steel output.) The industry now produces the bulk of its raw steel in oxygen converters and electric furnaces. Activation of idle open hearth furnaces would be expensive, especially if anti-pollution controls are to be installed.

With U. S. producers straining to supply their customers, imports can be expected to remain at a high level. Last year, steel imports totaled 17.5 million tons and accounted for 16 percent of the U. S. market. This year, some steel users who have become dependent on imports have attempted to reestablish positions with U. S. mills. As a result of increased demand abroad and successive dollar devaluations, the price advantage of imported steel has been eliminated in some markets. In addition, some foreign mills have reduced their sales efforts here, partly because of heavier requirements at home.

The case of petroleum

In 1972, U. S. consumption of petroleum products totaled 6.0 billion barrels, up 7.5 percent from the previous year. In the ten-year period 1962-72, demand for petroleum products increased 4.5 percent annually. Larger demand has reflected increased output of petrochemicals, higher energy requirements overall (especially for vehicles), and increased use of oil for heating. Use of oil, or natural gas, in preference to high sulfur coal has been pushed by environmental regulations in recent years.

Once self-sufficient in petroleum production, the United States has been increasingly dependent on imports, both of crude oil and refined products. This trend has accelerated in recent years as U. S. production of crude oil leveled off, despite the elimination of production controls, while demand continued to rise. Last year, 30 percent of U. S. petroleum requirements were obtained from abroad. This proportion has increased steadily: in 1962, it was 20 percent; in 1952, 12 percent. With relatively little exploration under way in the contiguous United States, and with a failure to obtain Alaskan supplies because of environmentalist opposition to the pro-

posed pipeline, dependence on foreign oil is almost certain to increase substantially in the years ahead. The outlook is particularly bleak because the price differential in favor of imports has been largely eliminated.

Even if adequate supplies of crude were available, petroleum product supplies would be limited by refining capacity. Many refineries have been operating at full capacity for the past six months. In late 1972, published data showed U. S. refineries operating at 89 percent of capacity. Industry experts insist that this rate is very close to effective capacity, partly because of the need to allow for maintenance and partly because of statistical conventions that understate operating rates.

In January 1973, there were reports, especially in the Midwest, of shortages of fuel oil both for factories and for diesel engines. Alternative fuels—gas, high-grade coal, and electric power—also were in limited supply. Some manufacturing operations in Midwest states were suspended briefly in January due to fuel shortages, but springlike temperatures and steps taken to augment supplies in areas of greatest stringency soon alleviated the situation.

In recent months, some major oil companies have announced steps to sharply reduce the size of their dealer organizations, especially in the Midwest, partly because of pressures on their refining capacity. Independent gasoline dealers have closed some or all of their stations because they are no longer able to purchase surplus supplies from integrated oil companies.

Various public statements have suggested that tight supplies of gasoline in the summer may require gas rationing. Moreover, severe stringencies in fuel oil are foretold for next winter, especially if average temperatures are low. Whether or not these fears are exaggerated remains to be seen. In any case, the adequacy of petroleum supplies is likely to continue to be a much-discussed issue for many years to come.

Emerging forces

Higher operating costs and upward pressures on prices usually accompany any shift from sluggish business conditions to vigorous expansion. But new forces developing over a period of many years have reinforced these tendencies in the current situation. Some of these forces are international, some are determined by government policies, some reflect private views.

After World War II, the United States was at its zenith as the dominant world power, while the economies of most other industrialized nations were severely injured or strained. Since then, economies of virtually all developed and underdeveloped nations have expanded at an unprecedented pace. Worldwide population growth accelerated, and the improvement in living standards was almost continuous.

Some years ago, the United States was able to augment domestic output of many raw materials and finished goods simply by reducing import barriers. But for an ever-growing list of items, particularly raw materials, world markets no longer serve as a cheap source of additional supplies. The changed situation has become especially clear in the past year when economic activity in almost all nations increased rapidly. Along with the business expansion has come increased consumption of minerals, fuels, and foodstuffs. Other nations are ready and able to pay prices for these goods that equal or exceed U. S. prices.

Within the United States, the share of goods and services going to support the armed services has been reduced with the winding down of the Vietnam war, but the share going for many other government programs—federal, state, and local—continues to grow. Expenditures on education, welfare, and programs intended to alleviate urban problems have increased each year. Either through direct purchases of goods and services, or through income supplements, most of these programs add

to pressures on resources.

The overall U. S. labor supply remains ample, but reports indicate insufficient numbers of technically-trained people. Doctors, accountants, engineers, and virtually all of the building, mechanical, and metal-working skills are in short supply. This situation reflects such factors as earlier retirements, curtailments of apprenticeship programs, and reduced interest in technical training on the part of many young people.

Depletion of natural resources—especially those cheapest and easiest to exploit—has accelerated in the past several years. The richest reserves of timber, iron ore, crude oil, and other minerals have been nearly exhausted. Development of new sources is increasingly expensive. Compare, for example, the discovery of an explosive oil gusher in the 1930s with the elaborate effort of finding and exploiting oil fields in submerged lands or in the Arctic.

Costs of satisfying pollution regulations have been mentioned frequently in the past year or two as principal causes of plant shutdowns, as reasons for not activating older facilities, and as reasons for not building new facilities. Examples include electric power plants, paper mills, steel furnaces, oil refineries, and metal refineries. Smaller plants such as foundries, forge shops, and metal platers have been particularly hard hit.

Plant closings of low-profit facilities were especially common when these were controlled by the conglomerate corporations that proliferated in the 1960s. When a labor force is dispersed and equipment is sold, there can be no response to a pickup in demand, however sharp. Former owners, often a family group, might have sustained operations in the recession.

The reduced level of capital spending, especially in manufacturing, in the years 1970-72 was associated with a decline in effective capacity in many industries. Now that a significant upturn has begun, increased capital spending programs will

tend, temporarily, to draw available resources from final consumption.

Pollution controls are taking a large, but unquantified, share of expenditures on plant and equipment. In addition, much research and development activity is being devoted to attempts to satisfy emission and safety requirements for finished products, especially motor vehicles. Moreover, devices added to vehicles often significantly increase fuel consumption, and thereby further enlarge the problem.

Many of the changes in supply-demand relationships in the past year have their roots in developments of the past 10 or 20 years. The extent of the pressures on capacity has been more clearly revealed as the economic throttle was moved forward and the pace of the expansion shifted into high gear. These problems will not be corrected quickly or painlessly.

Good news, bad news

Warnings of pressures on capacity should not be taken to mean that a ceiling on total output has been reached or is at hand. A consensus of forecasts holds that real output will rise more in 1973 than in 1972, although the rate of expansion may slow in the second half.

Each day, more workers are being hired and trained and additional people are being shifted to areas of greatest need. Managers are working to break bottlenecks, locate alternative sources of supply, and increase efficiency. The federal government has taken steps to expand agricultural acreage, sell substantial quantities of the strategic materials in its stockpile, and increase cuttings of timber on federal lands. Industrial facilities are being modernized. New buildings and equipment are being added month by month.

Expenditures on new plant and equipment in the United States are projected to rise 14 percent this year—18 percent in manufacturing—the largest gains since

1966. A large share of these outlays will be channeled to the areas where the pinch on supply is most significant. However, a disturbing note revealed in the capital spending surveys is that no plans are in motion to increase basic steel capacity (a four- or five-year project) or to build new oil refineries (three years or more to complete). In some other industries, executives are marking time on capacity expansion decisions—still not sure that the upswing is destined for a long and happy life. Many such doubts will be resolved, one way or the other, as the year unfolds.

An overview of the forces influencing supply and demand does not argue for easy solutions—rigid controls, household boycotts, or vague suggestions that the economic growth rate be slowed. No sinister forces are at work. Inflation occurs in a modern society because demands backed up by purchasing power can expand without limit, while output can expand only as available resources and technology permit.

Price and wage controls probably slowed the rate of advance of most finished goods prices in the past year and a half. But industry analysts make a convincing case that controls reduced availability in some markets, and thereby intensified inflationary forces. Following the announcement of Phase III, Administration spokesmen made reference to the “stick” of enforcement. But they also stated that price increases would be allowed to aid “efficient allocation of resources or to maintain adequate levels of supply.” An attempt to hold prices below levels that balance supply and demand requires a system of rationing and elaborate enforcement machinery. Aside from the danger of hampering desirable market adjustments, such a harness of controls would absorb large numbers of trained workers in both business and government.

George W. Cloos

Banking developments

Federal funds activity grows

Both the number of district banks participating and the volume of funds loaned in the federal funds market increased again in 1972. Through this market, banks borrow from or lend to other banks for a day at a time, mainly through transfers between reserve accounts at Federal Reserve banks.

Gross purchases of federal funds by Seventh District member banks averaged \$4.3 billion per day in 1972, one-third greater than in 1971. The gain in 1971 over 1970 was 17 percent. The number of member banks reporting they purchased funds averaged 154 per week last year, compared to 127 in 1971 and 123 in 1970. (There are about 940 member banks in this district.)

Activity on the selling side of the market has grown even faster. Gross sales by district banks averaged \$3.4 billion daily in 1972—up more than 40 percent over 1971. The average number of banks selling funds each week was 724 in 1972, up from 681 in 1971, and 639 in 1970.

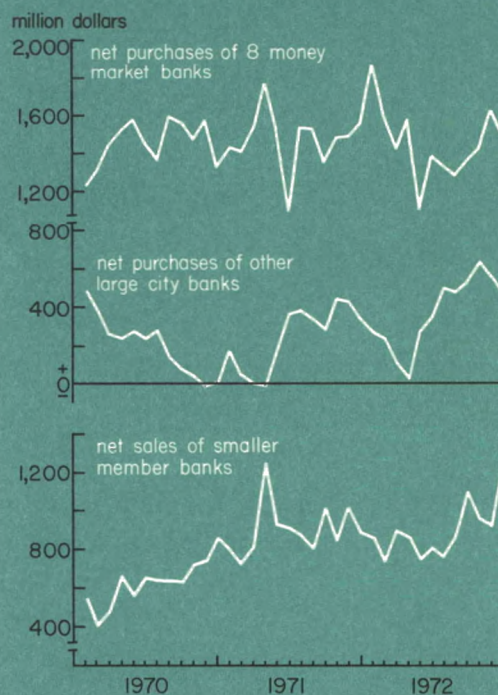
A substantial part of the 1972 increase in volume reflects simultaneous buying and selling by banks that act as intermediaries in the market for correspondents whose transactions are relatively small. Total funds purchased exceeded total funds sold by \$930 million per day last year, compared to \$822 million in 1971 and \$1.0 billion in 1970, indicating a net inflow from banks in other districts.

District member banks report daily federal funds transactions to this bank. For purposes of such reports, federal funds transactions are defined as "... the disposal (sale) or acquisition (purchase) of immediately available funds for one business day only at a specified rate of inter-

est." Comparable national data are not available, but the magnitude of interbank flows is indicated by reports compiled for 46 large banks throughout the nation. Daily average gross purchases of funds by these banks ranged above \$15 billion in some weeks of 1972 while gross sales averaged around \$5 billion.

A number of the largest banks use this market continuously as a source of funds although the net amount they purchase varies with changes in their day-to-day

Average daily net federal funds position of Seventh District member banks



Note: Data are averages of weeks ended on Wednesdays within month.

reserve needs. Net purchases of eight district "money market" banks have averaged well over \$1 billion daily for three years. During the second and third quarters of 1972, daily net purchases of five Chicago banks alone averaged over \$1.5 billion.

Net purchases of federal funds by 45 other large district member banks have varied with the pressure of demands on the money market, generally reflected in the federal funds rate. Between January 1970 and March 1971, net purchases by these banks declined from \$500 million to \$1 million, while the monthly average fed funds rate dropped from 8.98 percent to 3.71 percent. During the final three quarters of 1972, average net purchases of these banks rose from \$33 million to \$475 million, as the fed funds rate increased from 4.17 percent to 5.33 percent. As a group, these banks tend to turn to the fed funds market as a marginal source of funds when bank loan demands outpace deposit growth.

Small- and medium-sized district member banks, as a group, persistently are net sellers of federal funds. Both the number of banks reporting sales and the amount of net sales have risen fairly steadily over recent years. In 1970, daily average net sales ranged from a low of \$550 million in January to \$865 million in December. In 1972, net sales ranged from an average of \$740 million in February to \$1,250 million in December. For small- and medium-sized banks, the market provides a means to keep fully invested while preserving a high degree of liquidity and providing a return that has averaged well above the yield on short-term Treasury bills.

Interbank deposits lower in 1972

For the first time in ten years, major U. S. banks reported an absolute decline in deposits of other domestic commercial banks. The 3 percent decline at all large U. S. banks in 1972 compares with a 5 percent gain in these deposits in 1971 and

Demand deposits due to domestic commercial banks at large banks in major cities

	Change in year ended		December 1972 (million dollars)
	Dec. 1971 (percent)	Dec. 1972 (percent)	
Chicago	+ 4	- 5	1,384
Detroit	+ 9	-14	302
Milwaukee	+ 8	- 8	251
Indianapolis	+13	-12	135
Des Moines	- 4	+13	157
U. S.—all leading cities	+ 5	- 3	21,738

Note: Data are based on averages of Wednesdays in December.

even larger increases in the four previous years. A similar pattern was evident in the principal city of each Seventh District state except Iowa. (See table. Year-to-year changes are based on averages for Wednesdays in December.)

Interbank (correspondent) balances declined as a proportion of total demand deposits through most of the 1960s. This trend was reversed from 1969 through 1971. Last December, correspondent balances accounted for 14 percent of the demand deposits of large banks—1 percentage point less than in December 1970 and 1971, but above the average for the 1960s.

Part of the reduction in correspondent balances in 1972 can be attributed to the mid-November change in Regulation J. Regulation J now requires all banks to whom the Federal Reserve presents checks for payment to remit in immediately available funds on the day the checks are presented. Prior to the change, most banks located outside Federal Reserve bank or branch cities remitted to the Federal Reserve in funds available one or more business days after the checks were presented. Because most smaller banks in the nation were affected by the change, it was anticipated that initial adjustments would produce temporary declines in the balances these banks hold with correspondent banks.

Total interbank deposits at large city banks throughout the nation were \$1.4 billion lower, off 6 percent on average, for the six Wednesdays following the change in J than for the six Wednesdays preceding it. This development only accentuated a trend in process. Correspondent balances reached a 1972 peak in March and were below year-earlier levels on three-fourths of the Wednesdays in the second and third quarters.

Business loan rates and other terms

Interest rates on short-term business loans made in early February by the largest district banks were the highest in two years. According to the Federal Reserve's Quarterly Interest Rate Survey (QIRS), contract rates on business loans made during the first seven business days of February and maturing in one year or less, weighted by the dollar volume at those rates, averaged 6.48 percent. This compares with 6.27 percent three months earlier, and 5.37 percent in February of 1972. Changes in the QIRS averages generally have reflected changes in the prime rate with some variation due to changes in the proportion of loans made at various differentials above the prime. The margin increases as the

creditworthiness of the borrower declines, a factor often associated with loan size.

The prime rate at the reporting banks was 5.75 percent in November and 6 percent in February. The increase in the QIRS weighted average rate was slightly less than the change in the prime because a larger share of February loans were large.

The weighted averages of rates reported for the February QIRS ranged from 6.35 percent on loans of \$1 million and over to 7.79 percent on loans of \$1,000 to \$9,999, a spread of 144 basis points. This spread between rates on the largest and smallest loans is well below the peak spread of 178 basis points in February of 1972 when rates were at a cyclical low, but substantially greater than the minimum spread of 26 basis points in August of 1969 when rates were approaching their cyclical highs. Cyclical swings in rates on large loans are wider because the cost of money, as distinct from charges for credit risk and servicing, is a larger component of these rates.

Since the mid-February QIRS, the prime rate has been raised further in response to the rising cost of funds and heavy credit demands. In addition, there is evidence that the banks are attempting to allocate funds by nonprice means. Two-fifths of the large district banks that report in the Quarterly Survey of Changes in Bank Lending Practices described February policies with respect to loan applications from new customers as moderately firmer than in November, and one-third of these banks were paying more attention to the borrower's value to the bank as a depositor or source of collateral business. One-fifth of the banks reported firmer compensating balance requirements. Nearly all of the respondents said they anticipated stronger than seasonal demand for business loans during the February to May period. But despite strong credit demands from businesses and more restrictive lending terms, few banks reported less willingness to make mortgage or consumer loans.

