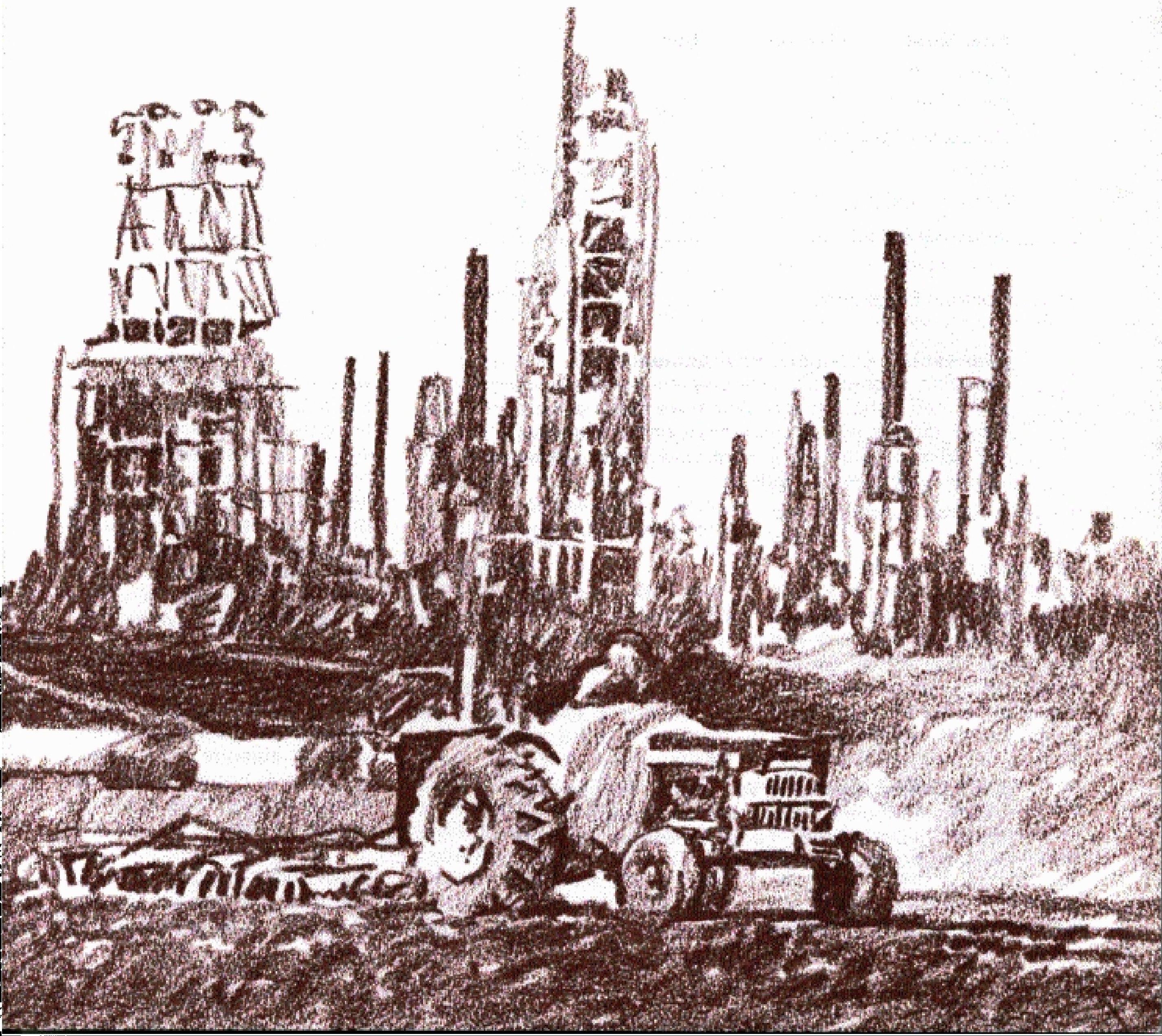
Ninth District Quarterly

Federal Reserve Bank of Minneapolis
May 1974

Minnesota's Economic Environment: 1985



First Quarter '74 Review & Outlook

Agriculture 1
Ag Credit 2
Consumer Spending 3
Finance 5
Construction 6
Industrial Activity 7
Labor Market 8
Contract Bargaining 9

Minnesota's Economic Environment: 1985
How has Minnesota's economy evolved? Has it performed satisfactorily? Why have some sectors grown rapidly while others have grown hardly at all? What problems still exist, and where are we headed in the next decade?

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Review & Outlook

First Quarter '74

The Ninth District's economy looked stronger after the first quarter than did the nation's. Despite the energy crisis and some materials shortages, district industrial sales were expected to better last year's by 13 percent. And the district's unemployment rate rose only one-tenth of a percentage point between the fourth quarter and January-February.

The district owes its strong first-quarter showing primarily to the ag sector. Record gains in farm income have been good for retail businesses, especially outside metropolitan areas, and for savings institutions as well. At both commercial banks and savings and loan associations (S&Ls), savings inflows were heavier in the first quarter than in the fourth quarter last year.

Second Quarter '74

Much of the district's economic future hinges on agriculture. The farm sector should still provide considerable impetus to business in the second quarter, but farm incomes may be lower than in 1973 which was an exceptionally good year.

Both retailers and resort owners are optimistic about their second quarter prospects. The tourist industry expects business to pick up in western parts of the district as travelers drive to the World's Fair in Spokane, Washington.

Continued strength in farm and farm-related incomes would cushion district commercial banks from a slowdown in savings inflows. And higher input prices and increased acreages should keep loan demand high.

Even with rising mortgage loan commitments at district S&Ls in January-February, the cost of new homebuilding will probably delay a resurgence of residential construction. But a thriving nonresidential sector should compensate somewhat.

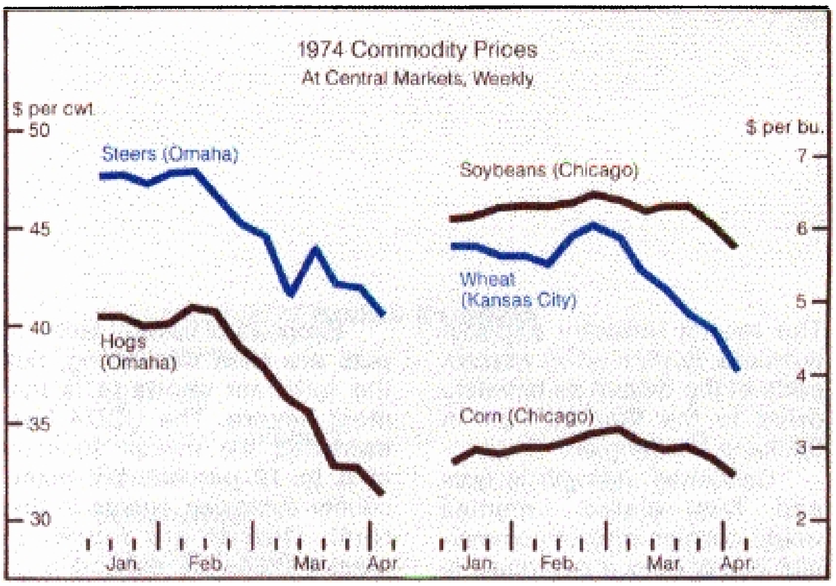
Agriculture

If the first quarter of 1974 is an indication of things to come, the oft-proclaimed new era in agriculture is going to be a mixed blessing for the district's farmers. Crop prices are still high, but livestock prices have tumbled, and the oversupplied cattle industry may be headed for a period of painful readjustment. Even grain prices have tapered lately; the price of wheat fell by more than a fourth between February 25 and March 26.

Supplies of several farm inputs are short this spring, but the fertilizer shortage is the most severe. The USDA has estimated the overall shortfall at 8 to 12 percent, but many county extension agents in the Ninth District are reporting greater shortages, especially of nitrogen fertilizer.

Farm machinery will also be in short supply through 1974. Machinery inventories are currently only a third of their normal levels. An official of the Farm and Industrial Equipment Institute estimates that the market will not reach equilibrium until at least mid-1975. Fuel stocks appear adequate in most areas.

One reason farm input supplies can't meet demand is the huge increase in planted acreage this year. Planted acreage will be up for both wheat and corn if farmers follow through on their March 1 planting intentions. Nationally, farmers intend to plant 20 percent more wheat and 10 percent more corn than last year. In the Ninth District, acreage planted to those two crops is expected to increase 25 percent and 8 percent, respectively. Soybean acreage is expected to decline 4 percent



nationally and 2 percent in the district.

Looking at farm prices, the most dramatic development in the first quarter was the sharp decline in livestock prices. Hog prices by late March had plunged to their lowest levels in more than a year, and cattle prices had fallen several dollars per hundredweight since early February.

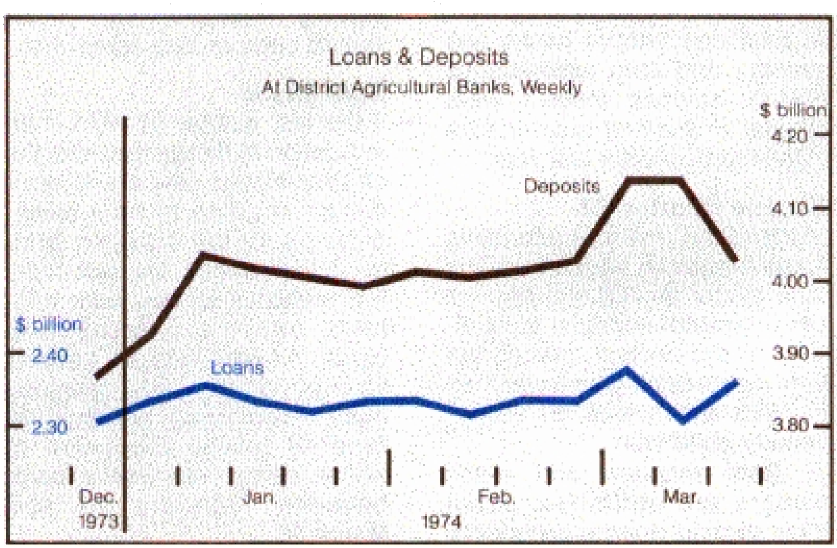
Wheat prices also fell sharply in March as export demand cooled. Total export bookings fell from 1.367 billion bushels on December 23 to 1.244 billion bushels on March 1 as many exports listed for "unknown destinations" were canceled. Corn prices complemented the decline in wheat prices, but to a lesser degree. Soybean prices held firm until late March despite the likelihood of large carryover stocks but then began declining in response to renewed fish meal production in Peru.

Ag Credit

As expected, the lucrative harvest of last fall led to a sharp increase in deposits at district agricultural banks in the first quarter. Within the first two weeks of the year, total deposits rose 4.4 percent, and from December 26 to March 20 the total rose 4.6 percent. Savings deposits at ag banks increased 11.2 percent in the first quarter.

But contrary to expectations, loan demand also held strong in rural areas because of higher input prices. Loans outstanding at ag banks as of March 20 were up 21.5 percent over a year ago.

Data released by the Farm Credit Administration also indicated strong loan demand in the first quarter. New loans made by Production Credit Associations were up 21.6 percent over January 1973 in the Ninth District and up 22.1 percent nationwide. New loans by Federal Land Banks (FLBs) rose 24.8 percent nationally over January of last year but fell 3 percent in the district; perhaps the especially rapid rise in land prices in this area has discour-



aged land sales. Since the January 1973 volume of new FLB loans was the largest monthly total in history, the slightly lower total for the district in January 1974 still reflects a strong demand for farm loans.

Second quarter developments should begin to reveal whether agriculture has indeed entered a new era of prosperity. By late June the wheat harvest will be in full swing in the lower plains. With total production expected to be more than 20 percent larger than last year, export demand must continue strong to maintain high prices.

Unless feeder placements pick up, the domestic demand for feed grains will be lower this year, and grain prices may fall further. However, export demand, which is currently running ahead of expectations, will give some strength to feed grain prices.

Past cutbacks in feeder placements will put upward pressures on fat cattle prices in coming months, but price rises may not last long if the supply of feeder cattle is as great as USDA figures indicate. Lagging consumer real incomes will also depress future beef prices, but falling feed grain prices may take some of the pressure off livestock feeders.

Loan demand should remain fairly strong in most areas as long as farm input prices stay high. In other areas loan demand will be depressed unless the outlook for cattle feeders improves in coming weeks.

Consumer Spending

Stimulated by rising farm incomes, personal income in the district made tremendous first-quarter gains. In the four full district states, personal incomes rose almost 16 percent between 1972 and 1973, and the Dakotas showed the sharpest gains of all states in the country during this period. (The national increase in personal income was only 12 percent.)

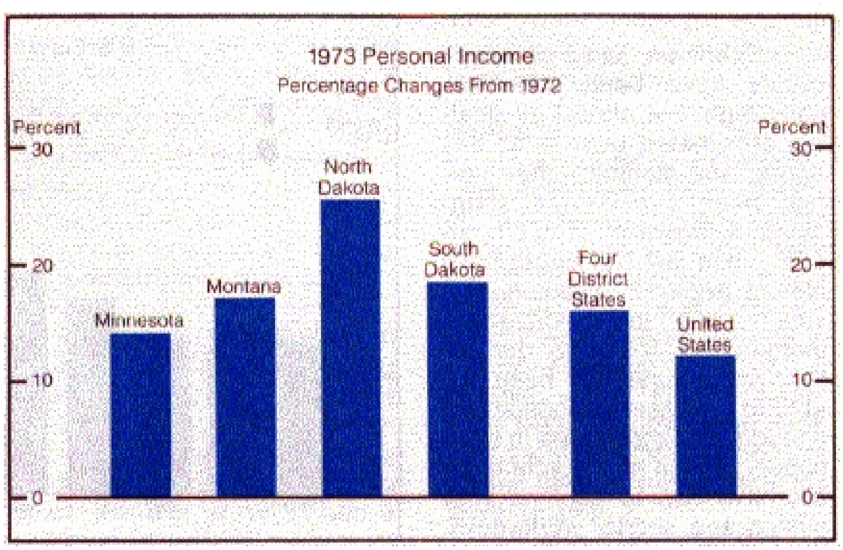
Personal income gains of this size are bound to show up in consumer spending figures, and Ninth District consumers have indeed been spending more than their national counterparts throughout 1973 and early 1974. District businessmen seem to expect this prosperity to last, but this expectation is highly dependent on good farm incomes again this year.

December-January retail sales in Minnesota were up almost 6 percent (seasonally adjusted) from July August 1973. Retail sales growth for the entire district was probably even greater than in Minnesota since personal income gains were larger in the Dakotas and Montana. Our March survey of district retailers, in fact, found that sales were stronger outside the Twin Cities.

U.S. retail sales in January-February, however, edged off from last fall's highs to the level of midsummer 1973.

Retailers interviewed in early March reported only small (5 to 9 percent) sales increases during the first two months of this year at their Minneapolis-St. Paul outlets. They attributed these gains to higher prices. Catalogue sales and sales outside the Twin Cities area were reported to be up 15 to 30 percent over year-earlier levels. Home improvement items and gardening equipment were selling best.

The gasoline shortage has



had a marked impact on sales of automobiles and motorcycles. Twin Cities dealers interviewed in our most recent survey said that new car sales in December and January were extremely poor; many dealerships reported unit sales declines of 30 to 50 percent from a year ago for large- and intermediate-size autos. Trucks and most compacts, however, were selling very well, and sales would have been even greater had supplies been available.

All the car dealers interviewed reported that sales in the Upper Midwest were much better than sales nationally and that their share of the national market had grown in the last few months. District car dealers were fairly optimistic about prospects for an upswing in sales this spring. They felt that auto sales bottomed out in early 1974 and that the end of the Arab oil embargo and continuing high personal income in the district promised a more profitable second quarter.

In contrast, sales of motorcycles have been phenomenally high, but almost all dealers anticipated poor sales this spring and summer—their normal peak period. The sharp sales increases of 25 to 50 percent since last November have almost depleted inventories of small- and intermediate-size motorcycles. The major domestic manufacturer has been unable to increase production fast enough, and imports are in short supply. British motorcycle makers have had to contend with strikes and shorter workweeks, so British models are particularly hard to get.

Dealers noted that this demand for motorcycles comes from a new type of customer—the middle-aged businessman seeking inexpensive transportation between home and office. Many dealers reported a large volume of sales to customers who've never ridden a cycle before.

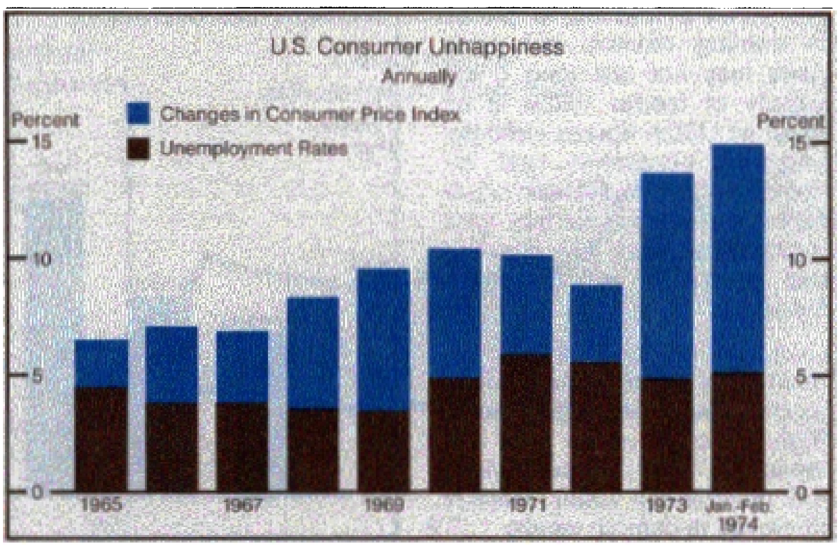
Resort owners contacted during our March survey reported poor to moderately good winter business because of the sharply reduced snowfall and fear of gasoline shortages. Reports from Montana, where all resorts experienced a very good year, were the exception. Most resorts said that local business and tour and convention groups were their main source of revenue last winter. Western resorts in the district expect to do extremely well this summer from traffic heading to the World's Fair in Spokane, Washington.

While businessmen—retailers, car dealers, resort owners—are optimistic about this spring, consumers are much more pessimistic.

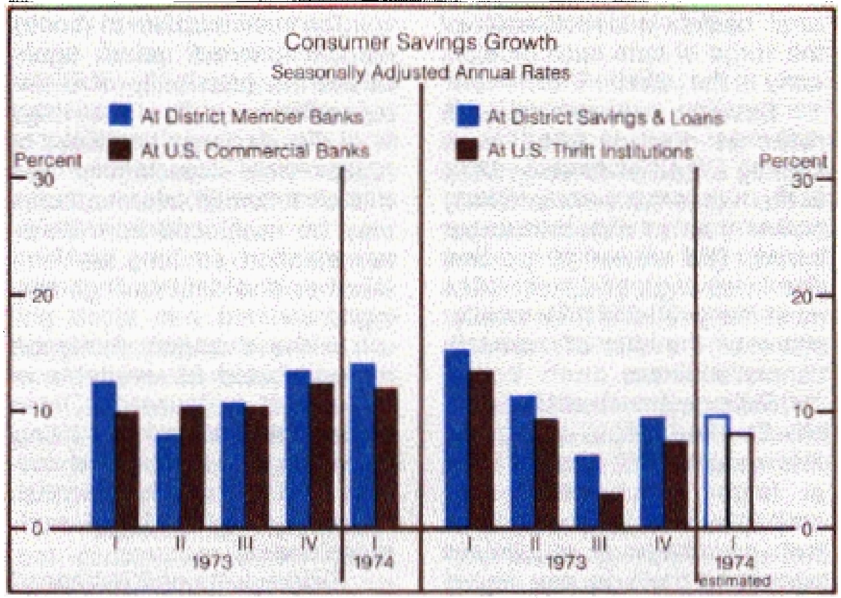
A suggested measure of consumer unhappiness is a combination of the unemployment rate and the rise in the Consumer Price Index (CPI). For the first two months of 1974, this indicator was at an all-time high.

The Minneapolis-St. Paul CPI rose 2.9 percent between October and January, while the U.S. CPI rose 2.3 percent. Sharper increases in the cost of home ownership, home heating fuel and medical care in the Twin Cities accounted for most of the difference. Consumer opinion surveys, however, do indicate that people expect things to improve in the next few months.

Spiraling inflation, rising unemployment, the energy crisis and general disillusion-

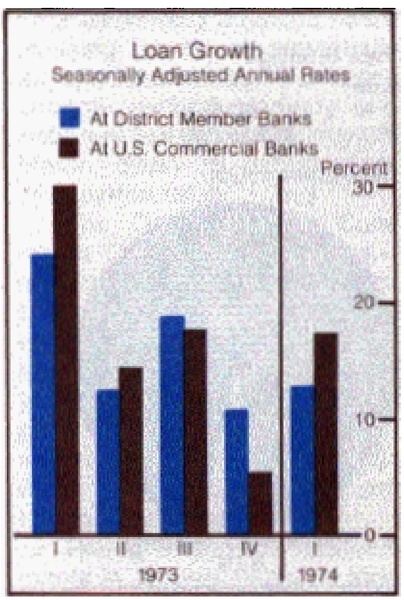


ment with government were the main factors in the continuing decline in consumer confidence, according to several recent public opinion polls. Many of the polls have posted new records for indicators of consumer pessimism. Over half the people interviewed in early 1974 believed the United States was in a recession.



Finance

The agricultural prosperity has been good not only for the retail business but for the banking business as well. Loan demand and savings inflows at district commercial banks remained quite strong in the first quarter. Loans outstanding at district member banks increased at a seasonally adjusted annual rate of 13 percent in the first quarter, after advancing 11 percent in the fourth. Savings deposits at district member banks and S&Ls increased at annual rates of 14 and 10 percent, respectively.



Loans

Most of the 13 percent growth in loans at district banks occurred in rural areas where farmers borrowed to meet increased production costs.

Loan growth at larger banks in the district was rather slow until March, even with heavy business loan demand. Early in the quarter, larger banks apparently tried to improve their liquidity positions by selling loans to other banks and holding companies and by tightening standards for loan commitments.

Mortgage loans picked up at district S&Ls, after a fairly weak fourth quarter, with a 14 percent growth rate in January-February. Supplies of loanable funds have been increasing since the end of 1973, and a backlog of loan commitments gave an extra boost to loans in the first quarter.

Consumer installment credit outstanding at district reporting banks in January-February was down 3.1 percent on a seasonally adjusted basis from last fall's peak. Most of the decline occurred in personal loans although a small drop was also recorded for auto installment loans.

Deposits

An acceleration in deposit inflows during the early months of 1974 helped to finance the growth in loans. At district member banks, demand deposits expanded at an 18 percent seasonally adjusted annual rate in January-February, up from 5 percent in the fourth quarter. Time deposits other than large CDs increased at a 14 percent annual rate, up slightly from the fourth quarter.

As with loans, most of the

growth in deposits occurred at rural banks—a direct result of the surge of farm cash receipts early in the year.

Savings deposit growth rates at district S&Ls were slightly ahead of those at S&Ls in the nation but were relatively slower than at district member banks. The slower 10 percent rise in savings at district S&Ls most likely reflects their smaller share of the district's rural financial business.

Savings growth at Minneapolis-St. Paul S&Ls during the first quarter was greater than at larger commercial banks, probably because these S&Ls took advantage of regulations permitting them to pay higher interest rates. In early March, however, the two largest S&Ls in the Twin Cities reduced by one-quarter point the rates paid on one- and four-year savings certificates. If other S&Ls adopt these changes, the rise in per-dollar deposit costs will slow, but the difference in savings growth rates at S&Ls and commercial banks may also narrow.

Liquidity

The aggregate loan-to-deposit ratio for district rural and smaller city banks stood at 63 percent in February, 3 percentage points higher than a year ago. Most of the ratio increase occurred at smaller city banks, which suggests that loanable funds at these banks may be tighter in the months ahead. Because deposit inflows at rural banks have almost kept up with the vigorous expansion in loans, rural banks have not seen a large increase in their loan-to-deposit ratios.

The recent upturn in money market interest rates again raises the possibility of disintermediation—a flow of savings from district banks and S&Ls to higher yield investments. But district financial intermediaries may be cushioned from disintermediation so long as farm incomes and rural savings stay high.

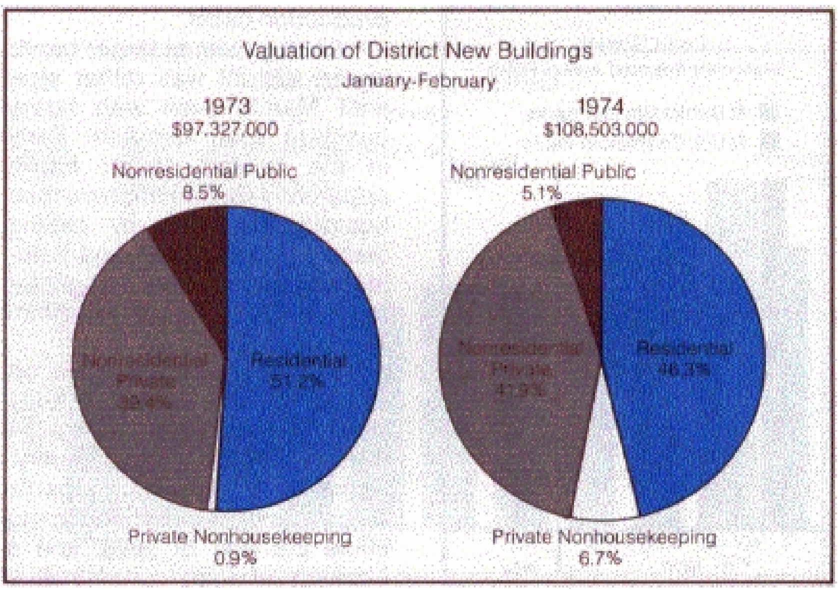
In the short-run, mortgage money should be available in the district because S&L loan commitments have been rising since December. Reduced savings in the next few months, however, may limit future mortgage lending.

Rising costs and increased production in the ag sector assure a continuing strong demand for loans at rural banks. Business loan demand at larger city banks should also remain strong in the face of higher wholesale prices and renewed national economic expansion.

Construction

The high cost of construction and prevailing materials shortages continue to depress district homebuilding. In the fourth quarter of 1973, housing unit authorizations registered a 53 percent year-to-year decline, but in the January-February period the decline was smaller: housing unit authorizations were down 15 percent from a year ago; apartment authorizations were off 17 percent, and 1-4 family residences were off 13 percent.

Although the number of housing unit authorizations declined, the valuation of permits issued was unchanged from a year ago. This discrepancy showed up clearly in the Minneapolis-St. Paul area where residential valuation increased 11 percent but units authorized decreased 7 percent. The in-



creased valuation may partly reflect a shift in the quality of housing, but it more probably reflects the increased costs of building.

With housing starts down, nonresidential valuation for the period was nevertheless 35.6 percent above a year ago—high enough to bring total valuation 20 percent above last year's level. The largest nonresidential gains were in the industrial, office, retail and public education categories.

The continued decline of residential construction has shifted the composition of new building valuation since last year. At 46.3 percent, residential construction is still the largest component of total valuation, but nonresidential private construction has grown from 39.4 to 41.9 percent of the total.

Nationally, housing unit authorizations for January were 39 percent lower than last year on a seasonally adjusted basis. Housing starts at seasonally adjusted annual rates increased strongly in both January and February but fell 22 percent in March, down 36 percent from year-earlier rates.

The Department of Commerce Composite Cost Index—an implicit price deflator combining cost changes and changes in types of construction activity—showed a 1973 year-end annual increase of 8.3 percent. Lumber costs dropped slightly in January, although they remained 26 percent higher than a year ago.

Rising mortgage commitments in January-February indicate that there should be more money available for mortgage loans during the second quarter. But with short-term interest rates also rising, funds may possibly flow out of thrift institutions, making mortgage money more difficult to obtain in a few months.

And even if mortgage money is available, high building costs and persistent materials shortages may still discourage new homebuilding.

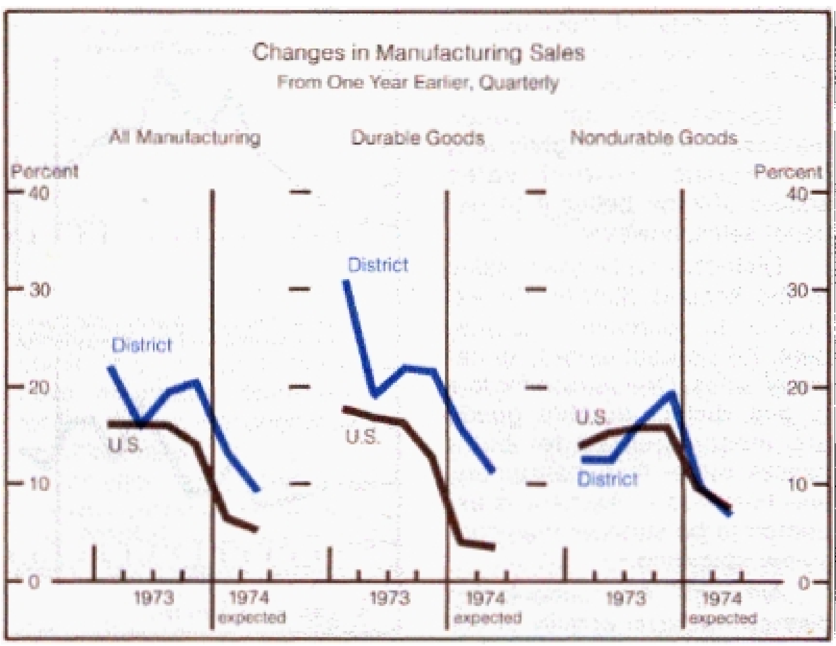
Consequently, residential construction through the second quarter will probably not match last year's levels.

Prospects for nonresidential construction seem better. Montana-Dakota Utilities recently announced 1974 construction plans totaling a record $27.8 million, up from last year's record $22.7 million. Gains in nonresidential construction should continue to offset the residential slump.

Industrial Activity

Responding to a national expectations survey, manufacturers anticipated a 6.3 percent year-to-year increase in first-quarter sales this year, less than half as much as the 14.1 percent increase realized in the fourth quarter of 1973. Consumer resistance to medium-size cars pulled down expectations for durable goods sales to 3.9 percent, and this in turn reduced total manufacturing sales expectations.

Ninth District manufacturers, by comparison, expected sales increases of 12.7 percent in the first quarter for all manufactured goods and increases of 9.5 percent for nondurable goods and 15.4 percent for durable goods. The auto industry is



a far less important part of the district's economy, which helps explain the 11.7 percent discrepancy between national and district durable sales expectations.

Other measures of district manufacturing activity reinforce the positive first-quarter sales outlook. Manufacturing employment was 6.9 percent greater than a year ago in January-February. Since last year, 8.8 percent more jobs were created in district durable goods industries and 3.3 percent more jobs opened up in nondurable goods industries.

National manufacturing employment during the January-February period grew only 3.3 percent.

The industrial use of electric power in the district was unchanged from the January-February 1973 level. This undoubtedly reflects the concerted efforts of business to conserve energy rather than a falloff in industrial production.

Beyond the first quarter, manufacturers are slightly less enthusiastic. District sales should still be better than national sales, however.

District durable goods sales in the second quarter are expected to increase 11.2 percent, 7.6 percent more than national sales. One reason for this is that district durable goods are mostly geared for businesses rather than consumers, and business investment is expected to be stronger than consumer spending.

Although the outlook for district industrial activity in the next few months is encouraging, inflation will be built into increased sales revenues. And in some industries materials shortages and capacity constraints are expected to slow down sales growth.

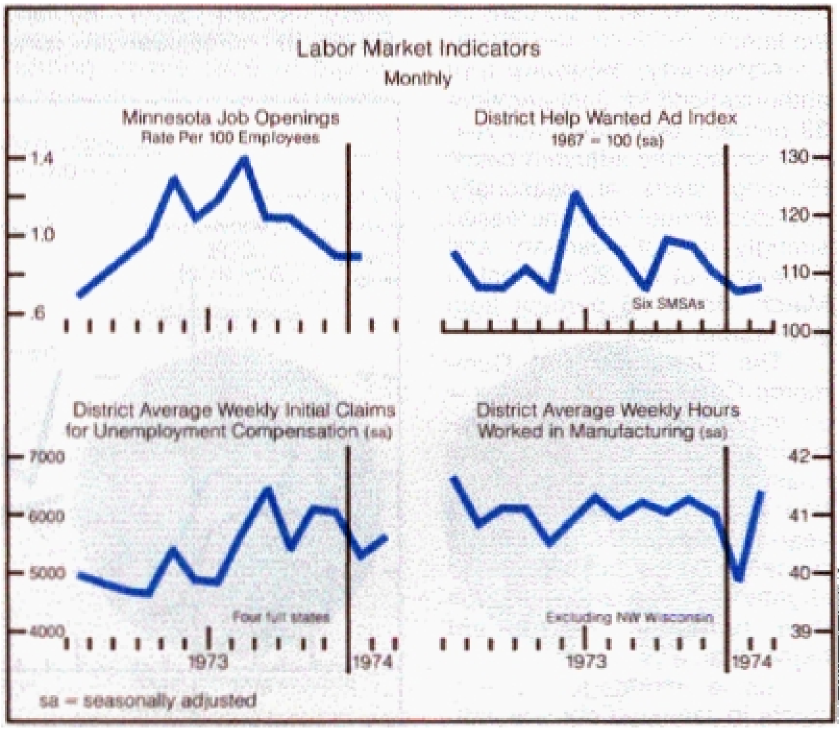
Labor Market

Fortunately for the Ninth District, the threat of widespread layoffs due to the energy crisis never materialized. District unemployment in January-February was 5.2 percent, only one-tenth of a percentage point higher than in the fourth quarter. And in early March, less than 1.5 percent, or 1,200, of the workers drawing unemployment compensation attributed their joblessness to the energy crisis.

National unemployment, although starting from a lower level, rose much faster. The U.S. unemployment rate was 4.7 percent in the fourth quarter but reached 5.2 percent in January-February. Close to 230,000 workers, 9 percent of those collecting unemployment compensation, claimed their joblessness was related to the energy crisis.

Part of the reason the district's unemployment rate changed so little was that district wage and salary employment continued to expand in early 1974. (Essentially no growth occurred in U.S. payroll employment.)

District manufacturing employment was up 2.9 percent from the fourth quarter at the



same time that auto industry layoffs caused a decline in manufacturing jobs nationally. District trade and construction employment also rose, while national employment was unchanged in the trade industry and fell in the construction industry. Only service employment rose in both the district and the nation.

Considering just these figures is perhaps misleading because other labor market indicators hint at some softening demand for labor. The district's help-wanted advertising index, for instance, has fallen from last summer's peak and was down 2.9 percent from a year earlier in January-February. District initial claims for unemployment insurance, although lower than in the fourth quarter, were 11.8 percent higher than a year ago.

Slightly more hopeful signs came from job openings and average hours worked in manufacturing data. Minnesota nonagricultural job openings were higher than a year ago in January but were still somewhat lower than the seasonal high last summer. And average weekly hours worked in manufacturing rose significantly in February after falling in January.

Recent employment growth, combined with a guardedly optimistic district outlook, points toward further employment gains in the second quarter. Just how large these gains will be depends on the availability of gasoline for summer tourism and the avoidance of major labor disputes. Some labor market indicators portend a softening in the demand for labor, and recent gains in manufacturing and trade jobs appear too large to be sustained.

Contract Bargaining

Minnesota, Montana, North Dakota and South Dakota have a combined total of 499,000 union members, according to the U.S. Office of Wages and Industrial Relations. Unions representing close to 20 percent of these workers, plus 18,000 district miners and steelworkers outside the four-state area, will be negotiating new contracts this year. The outcome of their negotiations will have important repercussions for the district's economy in the months ahead.

Inflation, which has eroded the real incomes of many district workers, permeates the 1974 bargaining scene as unions plan to "catch up" with the cost of living. The 9.8 percent increase in the Minneapolis-St. Paul Consumer Price Index from January 1973 to January 1974 exceeded last year's 5.9 percent increase in average weekly manufacturing earnings. And now that wage-price controls have been lifted, unions are expected to push for settlements well ahead of the average 5.2 percent increase over the life of a contract negotiated in 1973. (While in force, wage-price controls shifted bargaining away from wage increases to concerns such as safety, voluntary overtime and better working conditions.)

A look at contract negotiations in some of the district's major industries gives an idea of the demands district unions will be making.

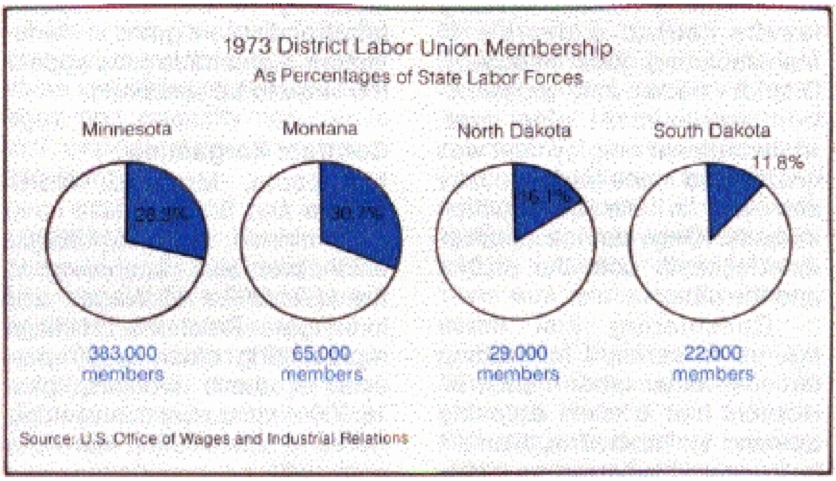
U.S. Collective Bargaining Settlements
Average Yearly Percent Increases in Wage-Rates

	1969	1970	1971	1972	1973
All Industries					
Life-of-Contract	7.6%	8.9%	8.1%	6.4%	5.2%
First-Year	9.2	11.9	11.6	7.3	5.8
Manufacturing					
First-Year	7.9	8.1	10.9	6.6	5.9
Nonmanufacturing					
First-Year	10.8	15.2	12.2	7.8	5.6

Source: USDL, Major Collective Bargaining Settlements, 1973

• *Food*

In January 1974, approximately 3,000 members of the Amalgamated Meat Cutters working at the George A. Hormel Company plant in Austin, Minnesota, agreed on a contract providing a 20-cent-an-hour wage increase in each of the next three years, cost-of-living adjustments each January and July, and pension improvements reducing retirement age from 62 to 60 over the life of the contract. Better vacations, life insurance increases and a drug, dental and optical program were also part of the agreement.



- *Scientific Instruments and Aerospace*

Honeywell and 7,000 members of Teamsters Local 1145 agreed on February 2, 1974, to a settlement which provides for pay increases ranging from 32 to 45 cents an hour this year and 42 to 60 cents in 1975. These workers now earn from $3.26 to $6.49 an hour. Their hourly wages will increase 16 to 23 percent during the next two years. In addition to pay increases, the new contract provides company-paid dental care for employees and dependents, improved insurance benefits, funeral leaves and, in 1975, a 10th holiday (Good Friday).

- *Construction*

Many contracts for district building trade unions have wage reopeners scheduled in 1974, so a number of construction workers will be bargaining this year. The construction industry has a history of work stoppages. In 1972, the last time contracts were negotiated, a lockout of construction workers in Minnesota idled approximately 27,000.

An Associated General Contractors (ACG) of Minnesota representative expects the unions to demand substantially higher wages this year. For the first time the AGC will be negotiating on a statewide basis with each building trade instead of dealing with individual locals, and this is expected to strengthen the AGC's bargaining position.

- *Communications*

Many district workers will be affected by negotiations scheduled this year between the Communications Workers of America, the International Brotherhood of Electrical Workers and the Bell System. Approximately 13,000 workers in Minnesota, Montana, North Dakota and South Dakota are members of the Communications Workers of America, and several thousand more are International Brotherhood of Electrical Workers Members.

Economic issues are expected to be settled on a national basis, which leaves working conditions and local problems for regional and local settlements.

Nationwide strikes occurred in this industry in 1947, 1968 and 1971, but recent strikes have had little impact on service because the telephone industry is so highly automated.

- *Steel*

This year's steel negotiations are important to the northeastern portion of the district—northeastern Minnesota, northwestern Wisconsin and the Upper Peninsula of Michigan—where approximately 23,000 members of the United Steelworkers reside. Last March the United Steelworkers and 10 steel makers signed an "Experimental Negotiating Agreement" which guarantees workers minimum increases of 3 percent in 1974, 1975 and 1976. Final agreement under this provision was reached in early April at an estimated cost increase to steel producers of 13.6 percent.

• *Copper*

Negotiations in the steel, aluminum and can industry will undoubtedly influence the settlements reached this year in the district's copper industry.

Labor negotiations are scheduled with both the White Pine Copper Mine in Upper Michigan and the Anaconda Company in Montana. The White Pine negotiations involve approximately 2,500 members of the United Steelworkers Union whose current contract is set to expire July 31. Anaconda's negotiations involve 12 different unions, and these contracts also expire in July.

• *Education*

The Minnesota Bureau of Mediation considers negotiations this year between Minnesota's 432 school districts and 55,000 teachers to be the state's most important labor negotiations. Most current contracts expire in June, and negotiations will begin this spring. A Minnesota Education Association spokesperson indicated that the teachers' primary concerns will be salary increases and measures to improve job security. Classroom size may also be an issue.

Minnesota's Economic Environment: 1985

This paper was prepared for a conference on the "Future Environment of Minnesota: The Education Task." Held May 12-14 at Onamia, Minnesota, the conference was sponsored by the Minnesota Academy of Sciences and the Science Museum of Minnesota. Projecting from past and present socioeconomic trends in Minnesota, this paper offers one speculative version of Minnesota's future.

Writing in the 1930s, British economist John Maynard Keynes envisioned a future age of abundance in which the primary problem of mankind, the struggle for subsistence, would be solved. Man's permanent problem would then become "how to use his freedom from pressing economic cares, and how to occupy his leisure...to live wisely and agreeably and well."

Like other Americans, Minnesotans have not yet gained that "freedom from pressing economic cares." Nonetheless, we have attained levels of affluence which for the average citizen were undreamed of only a half-century ago. By many standards our economic system has performed admirably.

Per capita income in Minnesota reached $4,300 by 1972, increasing at a slightly faster rate than in the nation. Minnesotans themselves are skilled and well-educated. The problems of pollution and urban blight are less severe here than in many other states. In many respects, Minnesota offers a good life that most Americans would find appealing—a combination of urban grace and rustic charm characteristic of few other areas in the country.

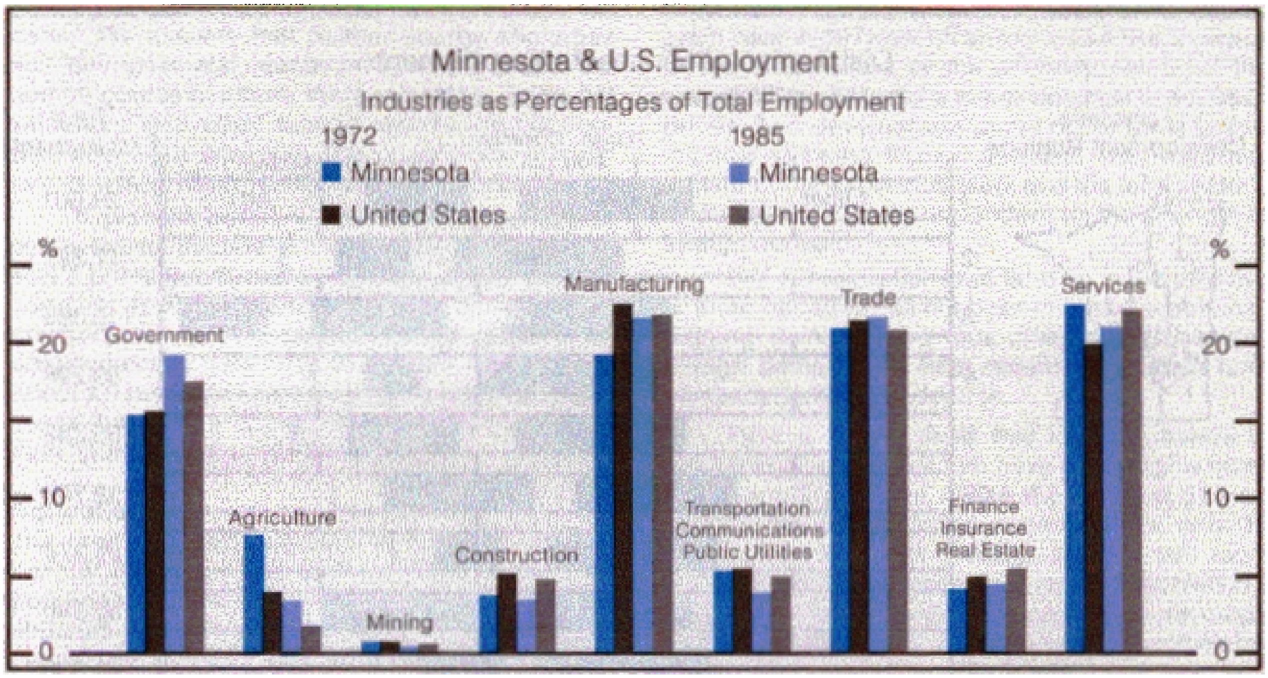
David Dahl, John Rosine and
Thomas Supel assumed responsibility
for preparation of this paper.

However, problems still remain. As in other agrarian states, a rapid out-migration has drained many rural areas of their vitality and left them incapable of supporting necessary social services. Neither welfare programs nor unprecedented levels of wealth have been able to eliminate pockets of poverty in the economy. Urban centers face the problem of paying for a growing list of public services. Many people seem uncomfortable with the way our economic system has been performing. Despite our affluence, we have not learned to live "wisely and agreeably and well." We have private riches but are still groping for a sense of public purpose. And as a nation, though we have better than a trillion dollar GNP, we are not certain how we want to use it.

The Minnesota Economy in 1974

How has Minnesota's economy evolved? Has it performed satisfactorily? Why have some sectors grown rapidly while others have grown hardly at all? What problems still exist, and where are we headed in the next decade? In answering these questions, it seems wise to begin by describing what an economic system is and by surveying the present Minnesota economy.

An economic system organizes the production, distribution and consumption of goods and services as people go about the business of making a living. Economic activity may be organized into sectors which differ according to the types of goods produced. Examples of economic sectors are the manufacturing sector, the agricultural sector, the trade sector and the services sector.

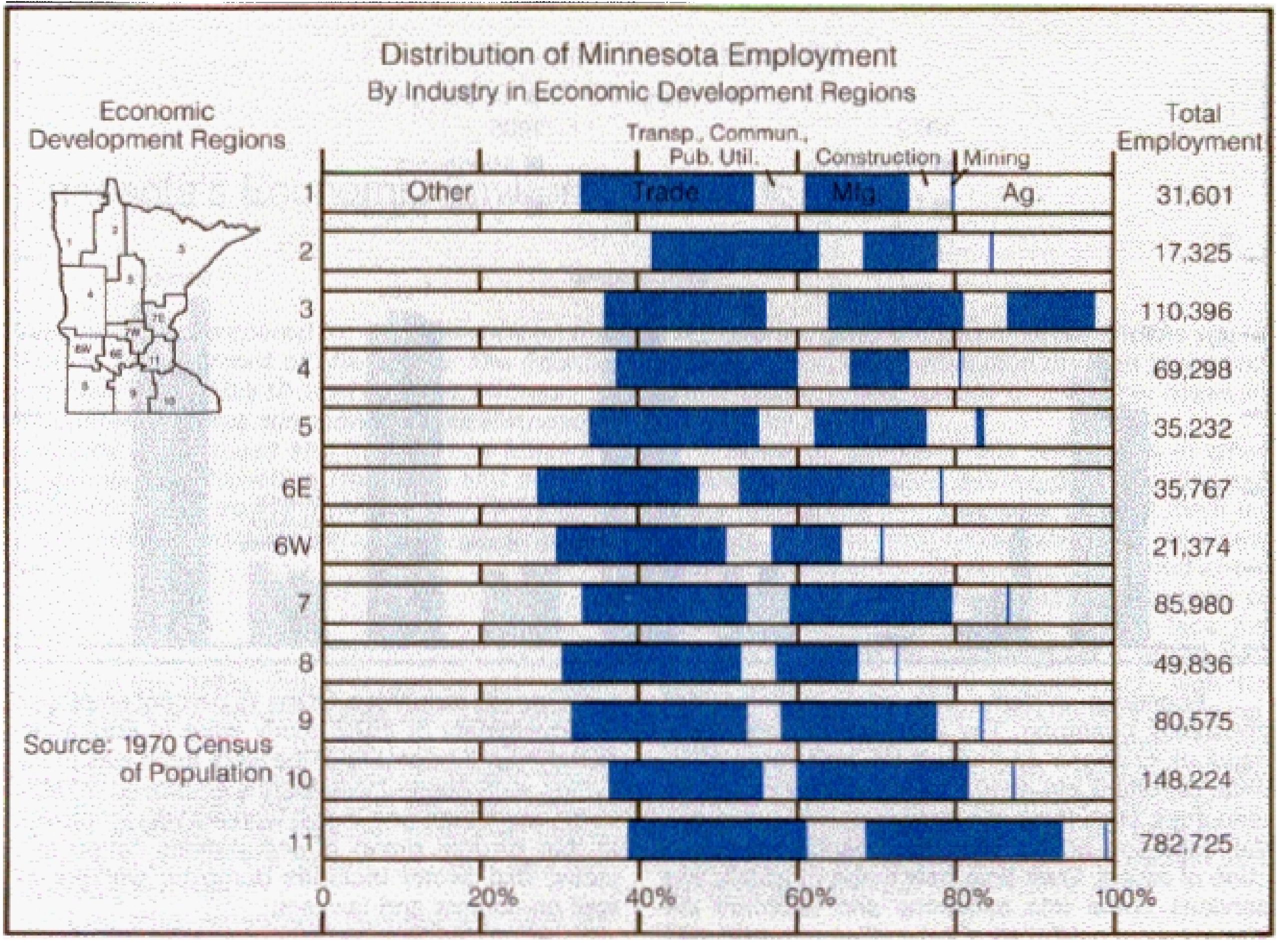


Economic systems, like other systems, are constantly changing. The demand for goods and services changes as consumers gain more affluence or rethink old attitudes. The discovery of new resources stimulates the growth of some sectors; the depletion of old resources results in the decline of others. Over time new types of goods and services come into existence and supplant the already existing goods. Cost-saving technologies alter the ways some goods are produced and make established methods of production obsolete. All these changes are ultimately reflected in the growth of some economic sectors and in the stagnation of others. More importantly for a region or state, the decline of one sector may result in unemployment, poverty and social decay.

By 1972 Minnesota's civilian work force had grown to 1,690,000, equal to about 2 percent of the total U.S. labor force. The farm sector was small in both the nation and in Minnesota but was roughly twice as prominent in Minnesota as in the nation. Manufacturing in Minnesota was slightly less important than in the United States, but was growing more rapidly. In both instances the major share of the manufacturing work force was employed in durable goods industries. Of the 15 percent employed in government in 1972, many were in education. Better than 20 percent of the work force was in the trades, with nearly three-fourths employed in retail trade. More than one in five workers was employed in that diverse group of occupations called services; this sector includes domestic workers as well as doctors and lawyers.

Regions within Minnesota differ markedly in their industrial structure. Several regions, notably western and southern regions, remain predominantly agricultural, and most of the supply and support industries in these regions cater to a farming constituency. There is little industrialization in most of these regions; in some, fewer than one in ten persons was employed in manufacturing in 1970.

Some regions of the state still tend to specialize in one economic activity, but the degree of specialization is becoming less pronounced. Mining in 1970 still accounted for more than 10 percent of the jobs in the Arrowhead region of northeastern Minnesota but has been declining in recent years. "Region 2" in northcentral Minne-



sota relied more heavily on lumbering and wood products manufacturing than did other districts; even so, only one in twenty workers in this region was employed in lumbering.

More than half the state's work force is employed in the Minneapolis-St. Paul metropolitan region. Agriculture, so important in outstate Minnesota, provides less than 1 percent of the employment in this area, but nearly two-thirds of the state's manufacturing activity is located there. The region also serves as the Upper Midwest's trade and finance center. Two-thirds of Minnesota's wholesale trade is centered in the Twin Cities area, as is nearly three-fourths of the employment in finance, insurance and real estate.

Trends and Projections

What trends have characterized the development of the economy? Can these trends be expected to continue? What will be the implications of future trends for different regions in Minnesota?

Some trends, such as changes in employment and income, are quantifiable. Others, such as changes in the economy's institutional underpinnings, are less quantifiable, and for these changes, our observations and projections tend to be more impressionistic. Nonetheless, institutional changes are just as real as changes in employment and cannot be ignored. Our employment projections for 1985 are just that—projections, not forecasts—and are valid only so long as the trends of the past continue unabated into the next decade.* We assume that neither energy shortages nor environmental constraints will disrupt the normal course of affairs. Wars, droughts, dollar devaluations and other random events are not considered in our analysis. The occurrence of such events would likely nullify our projections.

If present trends continue, we are likely to see a further decline in the importance of Minnesota's primary industries—agriculture and mining. Together these two sectors of the economy accounted for only 8.4 percent of the state's total employment in 1972, and that figure may drop to about 4.0 percent in 1985. However, both industries are perhaps more important to the state's economy than figures on employment indicate.

Agriculture

The rural to urban migration of the past quarter-century has been one of history's most massive population movements and has greatly altered the structure of Minnesota's economy. As late as 1950, nearly one of every four Minnesotans worked in agriculture; by 1972 that ratio had fallen to fewer than one in twelve. If past trends continue to 1985, fewer than one in twenty-five workers will be employed in farming, an annual rate of decline of 4.2 percent. However, in light of the farm prosperity of 1973, we must question whether long-run trends will in fact continue.

The key at this juncture appears to be foreign demand. In many ways the world of the 1970s is one interrelated market, and nowhere has this interrelatedness been more dramatic than in farming. Historically foreign demand has taken only a small share of our farm output. Through the 1960s we literally gave grain away. But by 1973 export sales had nearly tripled over 1970. The Russian grain deal in 1972 set off an explosive rise in wheat prices. The failure of the anchovy catch off the coast of Peru spurred a sharp upsurge in soybean prices. Two devaluations of the dollar gave further impetus to rising foreign demand. The world has indeed come to our doorstep, and the farm sector's future seems heavily dependent on the strength of foreign demand.

The out-migration from farming in the past two or three decades has not been merely a problem of lagging demand, and thus other factors besides foreign demand will help determine whether farm numbers continue to decline.

First, it seems likely that long-run trends in productivity—changes that have been highly labor saving—will continue. Since the smallest 51 percent of the state's farms accounted for only 13 percent of total sales in 1969, there is still room for consolidating commercial farming operations. The use of advanced labor-saving technology should contribute to a continued, if somewhat slower, reduction of farm numbers.

Second, past prices of purchased inputs such as fertilizer and petroleum products have been low relative to wages, and this has encouraged the rapid adoption of capital-intensive, energy-intensive farming techniques. Of course the long-run trend has been dramatically reversed by the energy crisis, which may slow the decline in farm numbers.

Third, a continuing specialization of economic activities will probably further circumscribe the farmer's domain as activities formerly performed on the farm are performed at the next stage in the production process. Moreover, for at least some products, the farms of the future may bear little resemblance to conventional farms—this is already true of the broiler industry and the large feedlot operations, both of which are structured more like factories than like farms.

The future of the ag sector is thus clouded with uncertainties. Export demand is especially uncertain. Mounting world population pressures may sustain exports at high levels in future years, but there is the haunting possibility that 1973 was a one-shot affair, that we may be headed back into a world of surplus and low farm prices.

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*Migration is not expected to either significantly increase or decrease the rate of growth of the state's labor force. No explicit assumptions have been made regarding participation rates; however, the trend line projections implicitly reflect recent changes in the age-sex composition of the labor force.

These projections were obtained using least-square statistical techniques. Ad hoc adjustments were made in the statistical projections whenever it was deemed that the projections obtained were inconsistent. Throughout, the unemployment rate was assumed to be 3.9 percent of the civilian work force.

Mining

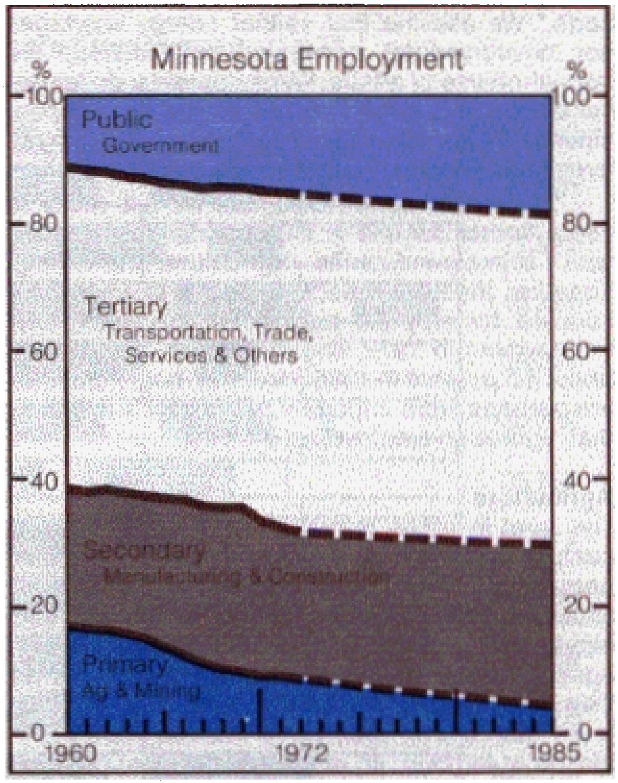
Like agriculture, mining has often been cited as a declining industry. But unlike agriculture, the mining industry is highly localized, and regional concentration has translated directly into high cyclical rates of unemployment in the iron ore areas of northeastern Minnesota.

Several problems have plagued the industry. The depletion of higher grade ores has raised the industry's cost structure and encouraged the switch to alternative metals. Advanced technology in metal-using industries has reduced the metal content per unit of output, thereby attenuating the demand for iron. Within the mining sector, rapid productivity gains per worker (4.2 percent annually for the nation) have constrained the need for labor inputs. Surface mining, amenable to the use of capital-intensive techniques, has largely replaced underground mining. The problem of declining employment in the mining regions has been compounded by secondary employment impacts such as the decline in transport jobs.

Projecting current trends to 1985, mining employment will fall to 10,000 persons, less than one-half of 1 percent of the state's work force. However, the future of the industry may be almost as uncertain as that of agriculture. Domestic price controls and soaring world prices have boosted export demand, but the nation is still a net importer of many key resources. In a resource-short world of the future, we may find ourselves facing cartel arrangements patterned after the Arab oil embargo—the bauxite-producing nations are already exploring this possibility. If that happens, the resulting higher prices, together with continuing technological advances, might make the extraction of lower-grade ores economically feasible. This possibility has led to talk of exploiting low-grade nickel deposits found near the iron range. There is some room for expansion of the iron mining industry in Minnesota; however, any employment increases would probably be fairly modest.

Manufacturing & Construction

Minnesota has been favored in recent years with an industrial base of rapidly growing industries such as computers and electronics, and consequently, manufacturing activity in the state has grown more rapidly than in the nation. If this trend



continues to 1985, both the state and the nation will have roughly the same proportion of their work forces (25 percent) in the secondary industries—manufacturing and construction.

As late as 1955 there were marked differences in the industrial structure of Minnesota and the nation. A fifth of the state's work force was still employed in primary industries, compared to only 11 percent nationally. Nationwide, manufacturing and construction activity provided 31.7 percent of all employment; 20.1 percent of Minnesota workers were employed in these secondary industries.

Minnesota's rapid shift to secondary industries since 1955 is not unusual. Economies in the early stages of development typically depend heavily on primary industries such as mining, forestry and agriculture for their employment base. Later, manufacturing plays a larger role before leveling off or perhaps even declining as the services sector gains in importance.

Total manufacturing employment in Minnesota grew at the annual rate of 2.5 percent over the 1960-72 period. By 1972 manufacturing employment totaled 307,500 workers, 19.3 percent of the state's total employment. Durables grew faster than nondurables—3.6 percent versus 1.3 percent, respectively.

Within the durable goods sector, employment growth was most rapid in the metal-fabricating and machinery manufacturing sectors. Much of this expansion was in rapidly growing industries such as computers and electronics. Manufacturing employment in the wood and lumber products industries declined.

The slower growth in nondurables was due largely to declining employment in the food and kindred products industries, which comprise about one-third of the state's total employment in nondurables. Publishing and printing was also a slow-growth industry over the decade of the 1960s. While chemical production expanded rapidly, it still accounted for only 2.5 percent of manufacturing employment by 1970.

The projected growth rate of total manufacturing employment to 1985 is 2.6 percent. Durables are expected to continue growing more rapidly at 3.8 percent per year than nondurables at 0.7 percent.

As in the other sectors, certain factors complicate future projections; the main complication here is energy. Minnesota is an energy importer, and its harsh climate makes it a relatively energy-intensive region. Will the high cost of energy put the state at a disadvantage relative to other regions? That's hard to say. True, we do import most of our energy, but except for coal, the costs of transporting energy are not very great. The overall energy-intensity of our industrial structure does not appear to be very great, even though some specific industries such as food processing are highly energy intensive. One thing does seem certain: the cost of enjoying Minnesota's good life is going to be higher in the future, and because of this, it may take a higher wage structure to attract and hold labor inputs in this area. On balance the state may suffer a disadvantage relative to other regions, but we do not know how serious this disadvantage will be.

Transportation, Trade & Services

Among the support industries, developments in the transportation sector may be the most significant. Americans have long enjoyed the luxury of a highly personalized transportation system but may now be moving toward greater reliance on public transit. Environmentalists argue that the high social costs of our system—pollution, noise, urban sprawl—vastly outweigh the private benefits. In addition to the high social costs, the private costs of transportation have soared in the past year, and this provides an incentive for the expansion of public facilities. Future developments in transportation will depend on a choice we make as a society: Do we want to expand our public facilities or continue to rely primarily on the automobile?

Transportation employment in the private sector provided 3.6 percent of the state's total employment in 1972. Over the 1960-72 period total private transportation employment—especially railroad employment—slowly declined, although employment in trucking and other industries did increase at a modest pace. Talk of reviving rail travel and the possible development of western coal reserves enhance the future of railroads, however.

Another support industry, wholesale and retail trade, provided more jobs for Minnesotans in 1972 (332,000 combined) than any other sector. Retail trade comprised one of the fastest growing sectors of the economy over the past decade, averaging 3.2 percent per year. The projected rates of growth to 1985 are 2.7 percent in retail and 1.4 percent in wholesale trade. Both rates are slightly lower than past trends, which is consistent with the view that the economy will slow in the late 1970s because of declining rates of population growth.

A third important tertiary industry is the services sector, often considered a growth area of the economy. Not all service industries are growing, however; while professional services employment has been multiplying rapidly, household and self-employed positions have been disappearing. Consolidation and reorganization within the services sector have also cut into service sector growth; functions once performed by small businesses are being taken over by larger organizations.

The demand for certain types of services, though, should expand in the next few years. Population growth will swell the demand for personal services, and business expansion will enhance the demand for business services. Shorter workweeks will allow consumers to devote more time to service-oriented recreation and entertainment. (Increases in leisure time are especially important to Minnesota with its outdoor recreational amenities—fishing, hunting, skiing, boating and snowmobiling.) And per capita income gains of about 50 percent between 1972 and 1985 will raise expenditures on services in general since they are highly responsive to changes in per capita income.

Government in the Economy

The scope of the public sector will broaden in coming years, rapidly increasing government employment. Government employment in Minnesota has already increased from 133,100 to 246,000 in the 1957-72 period. Much of the growth was in education as teachers were needed for the burgeoning school age population. Employment growth in education in the 1970s will almost certainly be slower than in the 1960s.

Projecting recent trends to 1985, employment in the government sector will rise to 380,000; the annual rate of growth should be 3.4 percent, less rapid than the 4.2 percent growth rate of the 1960s. State and local employment should continue expanding faster than federal employment. For while the federal government's comparative advantage appears to lie in the collection of revenue and in the formulation of general guidelines, the actual delivery of services is perhaps accomplished most efficiently at the local level where officials are more likely to be aware of specific regional needs.

We expect this expansion of the government's role for two reasons.

First, the output of "public goods" will probably be stepped up. Public goods are parks, schools, police services and fire protection which are most efficiently provided through the public sector.

Some economists believe that there has been in the past an overallocation of our resources to private goods at the expense of public goods. Other economists disagree. At any rate, expenditures on existing public services such as parks and public transit systems will increase as attempts are made to update or improve them.

But beyond extending existing services, the scope of government is broadening. Areas formerly considered the responsibility of the individual or family—health care and social security—are being taken over by government.

A second reason for the expanding role of government is the increased need to regulate private economic activity. The economic system has become highly complex and interrelated so that actions taken by one individual or firm result in external costs for other individuals or firms. Government regulation, it is argued, serves to more properly allocate these external costs. In environmental areas especially, the pervasiveness of external costs will likely create a need for more government control.

The Regional Location of Economic Activity

In the future there will probably be a further clustering of industrial activity in the Twin Cities or in other scattered growth centers around the state. A number of programs have encouraged industrial decentralization, but so far they have not been highly successful in luring industry to rural areas.

Industrial clustering is again a continuation of current trends. Most new industry has concentrated in and around the metropolitan region. According to the 1970 census, better than 85 percent of the state's manufacturing activity was located in the metropolitan region and the three surrounding regions. About 85 percent of the metal-working industries located in these regions, as did nearly 95 percent of the state's nonelectrical machinery manufacturing industries, about 80 percent of its food and kindred products industries, and nearly all of its electrical machinery industry.

There are compelling reasons to suppose that industry will continue to locate in only a few areas of the state. In determining location, firms must consider the location of markets and inputs. Manufacturing output is sold as inputs to other manufacturing firms or as final goods; in either case, firms are encouraged to locate near existing industrial or population centers. To secure inputs, firms seek to locate near existing labor markets or near their suppliers; this again encourages clustering.

The only industry in which there has been major dispersion is the food and kindred products industry. Because of improved refrigeration, firms can now locate in rural areas nearer the source of raw materials. Thus there has been a gain in employment in outstate areas and a decline in the Twin Cities. Even these firms, however, tend to relocate in regions adjacent to the Twin Cities, thereby forming a secondary manufacturing belt around the central market.

How will the energy crisis affect the regional distribution of economic activity? Rising transportation costs may well accelerate regional clustering. Small towns dependent on energy-intensive industries may be hard hit by rising energy costs. Since labor is the main substitute for energy inputs, future investments are likely to be more labor intensive, and this too may accelerate economic clustering near existing population centers.

The Economic Environment in 1985

In the next decade, economic change will encompass more than mere shifts in employment and gains in per capita income, for values, beliefs and mores are in flux, and the economy's legal foundation is evolving. We can expect that some established institutions will be replaced by emerging institutions more capable of dealing with existing social needs. Such changes, and others listed below, permeate the entire social structure.

- Serious questions are being raised about the meaning and purpose of economic growth. How much growth do we want? What sectors or regions should be growing? How can we minimize the undesirable impacts of economic growth? The manner in which these issues are resolved will influence future patterns of economic development. Since most people would agree that willy-nilly, undirected growth is not in our best long-run interests, there is an obvious need for coordinating and planning future growth. New institutions may emerge to fill that need. To some extent existing government units such as Economic Development Regions and the Metropolitan Council may take on the coordination of regional development. But there is room for a closer alliance between business and government in planning future growth.

- Property rights are also being redefined. Traditionally, the ownership of property carried with it the right to use that property as we desired. However, in the future the rights of owners may be increasingly restricted to safeguard the welfare of the community. Environmental constraints on private firms and zoning and land-use regulations are examples of such property restrictions.

- Attitudes toward work and leisure are changing dramatically. Economic institutions will need to become more flexible to accommodate these changing attitudes. Whereas workers once sought job security, many younger workers seek flexibility and express a fear of being "locked into" a position. They also seek greater satisfaction from their work and demand more of an input into decision-making processes. The ways workers spend their increasing leisure time will influence the types of goods and services produced 10 years from now.

- Subtle shifts in the locus of decision-making power are coming in both the private and public sectors. Some activities formerly performed in the private sector will be shifted to the public sector. And the desire for community control and more self-determination by local groups may result in more citizen input into the administration of existing programs. In some cases, power may become more decentralized as local officials administer federal programs; in others, the failure of local governments to deal effectively with social problems may lead to a centralization of authority in Washington.

- Despite a couple of false starts, the concept of a negative income tax is still very much alive. This tax would put a floor under the income level of every American. The proposal has much appeal for those who want to streamline the nation's patchwork welfare system, and there is a chance that some type of program will be enacted in the next few years.

- The energy issue is omnipresent. For many people, living in Minnesota is attractive because of its recreational amenities. From now on the cost of these amenities will be higher. This may well affect both the future growth of the labor force and the lifestyles of Minnesotans.

- Finally, though its impact on our daily lives is not fully understood, we cannot ignore the trend toward bigness in government, education and business. Bigness is overtaking the small business-

Minnesota and U.S. Employment Projections to 1985

Sectors	Minnesota: 1972 Employment[2] (Thousands)	Minnesota: 1972 Share	Minnesota: 1985 Employment[3] (Thousands)	Minnesota: 1985 Share	Minnesota: 1972-1985 Annual Growth Rate[4]	United States[1]: 1972 Employment (Millions)	United States[1]: 1972 Share	United States[1]: 1985 Employment (Millions)	United States[1]: 1985 Share	United States[1]: 1972-1985 Annual Growth Rate[4]
Total Employment	1,593.1	100.0%	1,980	100.0%	1.7%	85,597	100.0%	107,609	100.0%	1.8%
Government	246.0	15.4	380	19.2	3.4	13,290	15.5	18,800	17.5	2.7
Total Private	1,347.1	84.6	1,600	80.8	1.3	72,307	84.5	88,809	82.5	1.6
Agriculture	121.6	7.6	70	3.5	−4.2	3,450	4.0	1,900	1.8	−4.5
Nonagriculture	1,225.5	76.9	1,530	77.3	1.7	68,857	80.4	86,909	80.8	1.8
Mining	13.0	0.8	10	0.5	−2.0	645	0.8	632	0.6	−0.2
Construction	60.0	3.8	70	3.5	1.2	4,352	5.1	5,184	4.8	1.4
Manufacturing	307.5	19.3	430	21.7	2.6	19,281	22.5	23,499	21.8	1.5
Durable	170.9	10.7	280	14.1	3.9	11,091	13.0	14,154	13.2	1.9
Nondurable	136.7	8.6	150	7.6	0.7	8,190	9.6	9,345	8.7	1.0
Transportation, Communication and Public Utilities	86.6	5.4	80	4.0	−0.6	4,726	5.5	5,368	5.0	1.0
Transportation	56.7	3.6	50	2.5	−1.0	2,842	3.3	3,266	3.0	1.1
Communication and Public Utilities	29.9	1.9	30	1.5	0.0	1,874	2.2	2,102	2.0	0.9
Trade	332.3	20.9	430	21.7	2.0	18,432	21.5	22,381	20.8	1.5
Wholesale	83.2	5.2	100	5.1	1.4	4,235	4.9	5,123	4.8	1.5
Retail	249.1	15.6	330	16.7	2.2	14,197	16.6	17,258	16.0	1.5
Finance, Insurance and Real Estate	67.2	4.2	90	4.5	2.3	4,303	5.0	5,932	5.5	2.5
Services	358.9	22.5	420	21.2	1.2	17,815	20.0	23,913	22.2	2.3

[1]U.S. data and projections are from Table 9 in Ronald E. Kutscher's "The United States Economy in 1985: Projections of GNP, income, outlook, and employment," *Monthly Labor Review* (December 1973), pp. 27-42.

[2]Data prepared by the Minnesota Department of Manpower Services.

[3]These projections are based on least-squares estimates of trend rates of growth with subjective adjustments to insure consistency.

[4]Annual rate of growth, compounded annually, between 1972 and 1985.

man, the independent professional, the craftsman and the small farmer, and it seems fair to say that this trend will probably continue through the next decade.

Such changes mean that the 1985 economy will be different—perhaps radically different—from today's. Undoubtedly, new problems will arise as we adjust to rapid technological and social change. Of the challenges now facing us, perhaps the greatest one is coping with rapid change in the context of a decentralized economic system. Coordination is needed, but the term economic planning—conjuring up images of politburos and stifling bureaucracies—has typically been anathema to many Americans. We have taken pride in our flexibility and our ability to "muddle through." Nonetheless, there appears to be a growing need in our society for direction and purpose. Where that direction will come from is not yet clear.

Some Special Qualifications

Several factors which might produce significant deviations in our employment projections (see table) should be noted.

- **Demographics**

The principal demographic issues involve population size and labor force participation rates. The trend projections make no explicit allowance for the postwar baby boom "bubble" moving through the labor force. The baby boom causes the rate of growth in the labor force to accelerate up to about 1980, but from 1980 to 1985 the growth rate falls sharply as the "bubble" is absorbed. The recent sharp declines in birth rates will then lead to slower growth in both the labor force and total population. These factors have been explicitly introduced into the U.S. projections but not the Minnesota trend projections.

Errors in projecting birth rates to 1985, of course, will have little impact on labor force projections since the 1985 labor force is already born. However, family size could affect participation rates, of women particularly, and thereby affect the size of the 1985 labor force. A change in tax laws to allow day care kinds of expenses as business expenses for tax purposes without any limit on income eligibility could also have a significant effect on the number of women in the 1985 labor force.

- **Tastes**

A significant shift in consumer tastes for "leisure" could affect average hours worked per employee (currently declining at about 0.5 percent per year), and thereby affect the rate of growth in total output. Changes in tastes for "leisure products" could also affect the industrial composition but need not have a significant effect on total output.

- **Economic Policy**

A variety of policy issues could be significant in the Minnesota economic environment of 1985.

First, redefining full employment at a rate higher than 4 percent unemployment could mean a lower total output and smaller labor force than we've projected for 1985. Adoption of an income maintenance program might provide some political stimulus for redefining full employment. Near-term rates of inflation could also have a bearing on this issue.

Second, there appears to be an increasing concern among legislators for middle income people. Exactly how this concern will manifest itself is not clear, but there does seem to be action for middle income relief in the housing area. By providing for rehabilitation loans for middle income homeowners, government encourages people to stay in the city and salvage older neighborhoods. If this policy catches on, old neighborhoods may not be displaced by high-rise developments as extensively as in the past.

Finally, legislation of the sort which provides for Economic Development Regions might induce a closer alliance between business and government with significant implications for the way urban centers develop in the future.