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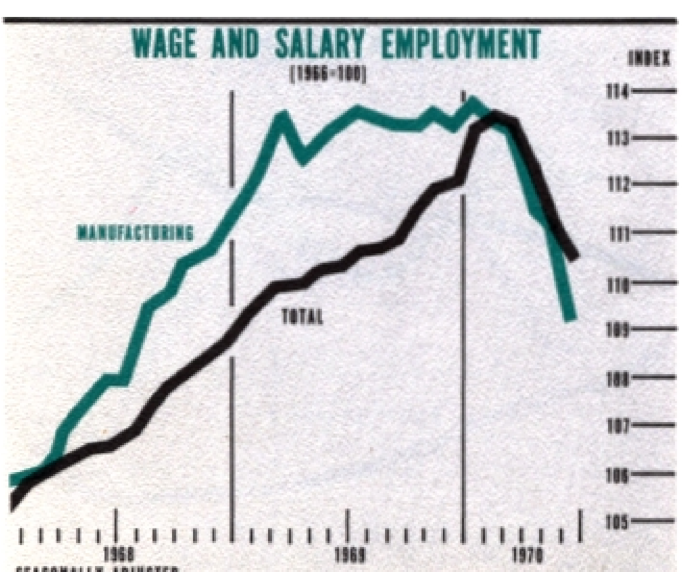
monthly statistical report

NINTH DISTRICT CONDITIONS
federal reserve bank of minneapolis

ECONOMIC ACTIVITY REMAINS SLUGGISH
WAGE AND SALARY EMPLOYMENT FALLS FURTHER

Ninth District economic conditions continue to weaken, according to latest available data. Employment, seasonally adjusted, fell further in June, and unemployment as a percentage of the labor force has risen all over the district. With the exception of the revival in home building, the construction industry remains depressed. Recent changes in Regulation Q, combined with the slowdown in district economic activity and uncertainty about the future, have stimulated a dramatic rise in time and savings deposits.

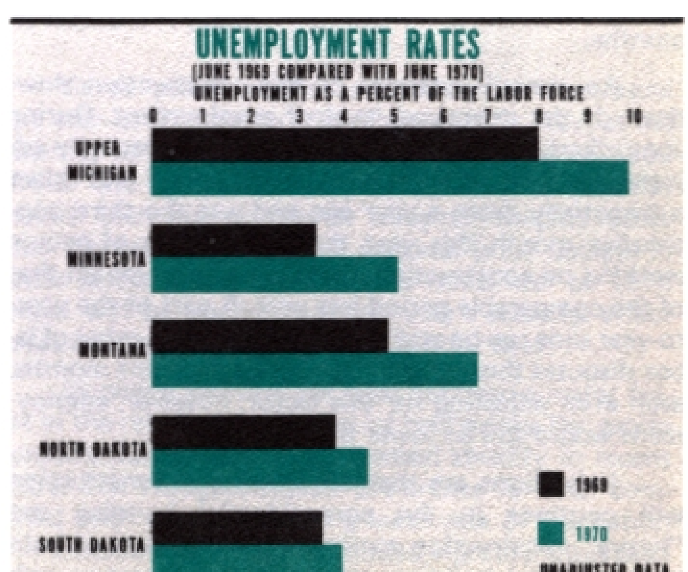
District wage and salary employment, seasonally adjusted, fell again in June for the fourth consecutive month and dropped to its lowest level in the past year. In the second quarter, district employment fell 6.6 percent at an annual rate, while in the nation it was down 1.2 percent. The district's recent declines can be traced to the manufacturing and construction sectors. The reduction in manufacturing employment is largely attributable to cutbacks in the durable goods industries. Construction employment fell because of generally weaker conditions in this sector and the large number of labor disputes.



District unemployment, seasonally adjusted, continued at a high level, and in June it was 4.7 percent of the labor force. This matches the 4.7 percent rate experienced nationwide, and compared with January's 3.4 percent district rate, it represents a considerable softening in district labor markets over the past six months. Reflecting the district's increase in unemployment, initial claims for unemployment compensation in the district during June were more than twice as high as they were last year.

All areas of the district have experienced this increase in unemployment. In Minnesota, the unemployment rate, not seasonally adjusted, rose from 3.4 percent last June to 5.1 percent this year. Montana's rate of unemployment in June was 6.7 percent compared to 4.9 percent last year, and Upper Michigan's climbed from 8.0 percent to 9.9 percent. More people are out of work in the Dakotas this year than last, but the rise has not been as great as in other district states. In North Dakota, the June unemployment rate was 4.4 percent compared with 3.8 percent a year ago; in South Dakota, it rose from 3.5 percent to 3.9 percent.

Other indicators also reflect the slowing in district economic activity. The district's help wanted advertising index, continuing the downward trend which

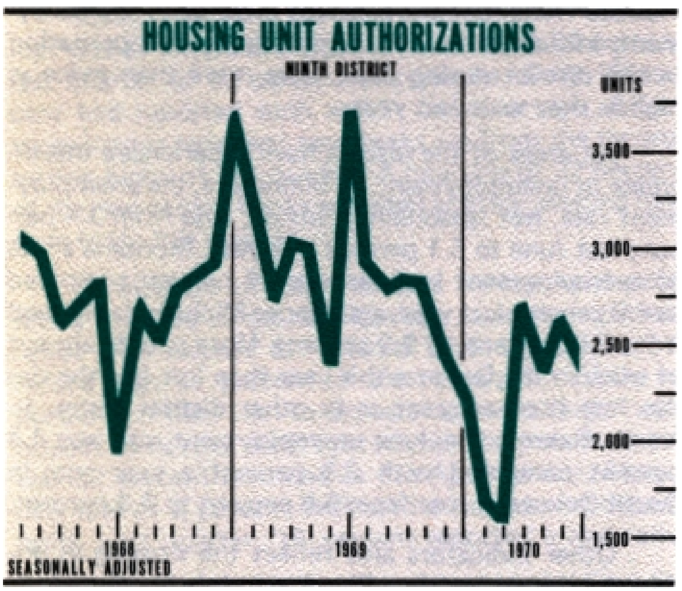


it has displayed since the beginning of the year, slipped again in June. The industrial use of electrical power has remained virtually constant during the first six months of this year compared with a 5 percent rate of growth in 1969. Production worker manhours, meanwhile, have trended downward for the last eight months. In June, the average number of hours worked in manufacturing fell to 39.9 hours, which is this indicator's lowest level in twelve years.

Consumer spending also appears to be sluggish. In Minnesota, retail sales on a seasonally adjusted basis rose slightly in May; but despite month-to-month fluctuations, the general level of retail sales has changed very little since last fall.

CONSTRUCTION SECTOR CONTINUES TO SLOW EXCEPT FOR REVIVAL IN HOUSE BUILDING

Construction in the Ninth Federal Reserve District is still depressed. With the exception of some resurgence in housing construction, indications are that



conditions will not change markedly in the next few months.

An overall indicator of this construction slowdown is the depressed level of employment. During June, district construction employment, seasonally adjusted, was at 86,200 workers. This level was down substantially from a year ago and was the third consecutive month this year that the number of people working on construction projects failed to match that of the comparable period last year. A part of the year-to-year slide can be attributed to the large number of labor disputes throughout the district in recent months; even after adjusting for this factor, however, employment would still be lower than last year.

Indications are that the slowing in construction will continue in the nonresidential building and "heavy" construction sectors. The valuations of both nonresidential building permits and contract awards during the first half of this year were up slightly from the same period last year, but the differences were not sufficient to cover cost increases over the period.

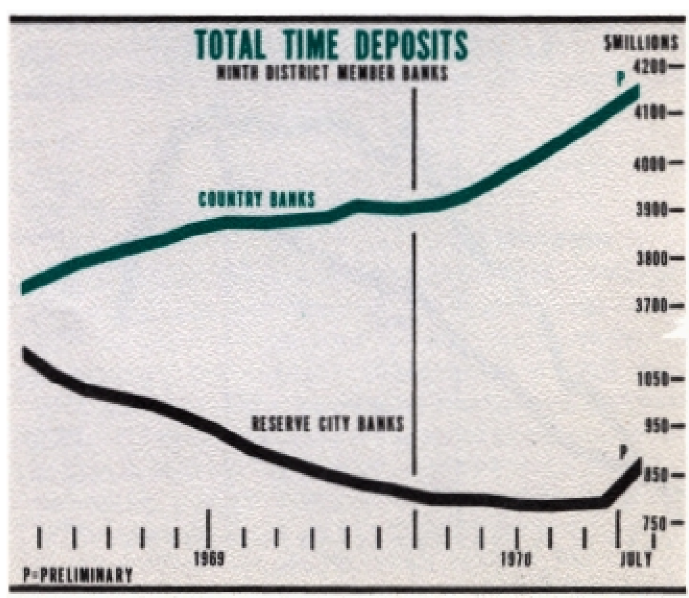
Contract awards for such things as highways, dams, and bridges during the first half of 1970 were down about 15 percent from the comparable period a year earlier. A factor which will further depress "heavy" construction is the cutback in federal construction funds which will be made available to individual states during the current fiscal year.

Evidence continues to mount that the district housing downturn has been reversed. After dropping steadily throughout most of 1969 to a trough in February of this year, building permit activity in the district jumped in March and remained at this higher plateau throughout the second quarter. During the second quarter, housing unit authorizations were up nearly 25 percent from the first quarter. Among the factors contributing to the expectation that housing will continue to gain strength are the recent increases in savings flows to thrift institutions and the passage of the Emergency Home Finance Act.

TIME AND SAVINGS DEPOSITS SOAR IN JULY REGULATION Q CHANGE SPURS LARGE INFLOW

The pace of time and savings deposit growth at district member banks accelerated during July, on top of the already rapid rate of expansion in recent months. This speedup in July largely reflected a sharp climb in purchases of large denomination CDs at city banks following the partial suspension of Regulation Q interest rate ceilings in the latter part of June. Prior to that action and throughout 1970, time deposits at large city banks had remained essentially unchanged.

Banks were quick to respond to this relaxation of Regulation Q requirements which applies only to certificates of deposit issued in denominations of $100,000 or more maturing in 30 to 89 days. In the first four weeks after the suspension went into effect



on June 24, total time and savings deposits at reserve city banks increased by $85 million, 10 percent of the amount outstanding prior to the suspension. Meanwhile, time deposits at country banks continued to rise vigorously during July.

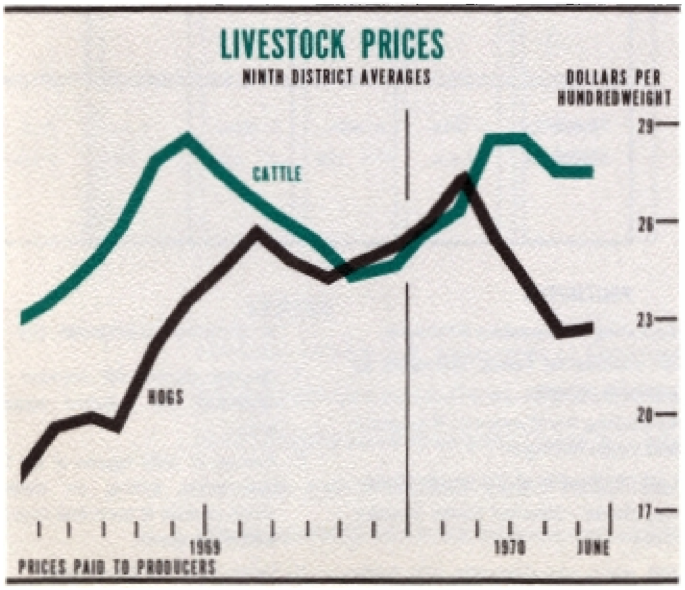
Demand deposits, seasonally adjusted, at district member banks rose sharply in July, nearly offsetting the decline posted in the preceding two-month period. The rise in July was partially due to a substantial increase in U. S. government demand deposits stemming from recent U. S. Treasury financings. As a result of the increase in both time and demand deposits, total deposits rose sharply in July after remaining level throughout May and June.

Outstanding loans, seasonally adjusted, at district member banks continued to expand vigorously in July. Repeating the pattern of recent months, the bulk of the July expansion occurred at large city banks. Business loans and loans to nonbank financial institutions accounted for most of the July increase in total loans at these large banks. Among the many factors underlying the strong demand for loans from these two sectors is the need for funds to increase working capital and to replace maturing commercial paper. Loans at district country banks continued to advance at a relatively weak pace in July, mainly reflecting a shortage of loanable funds due to relatively tight liquidity positions rather than a contraction of loan demand.

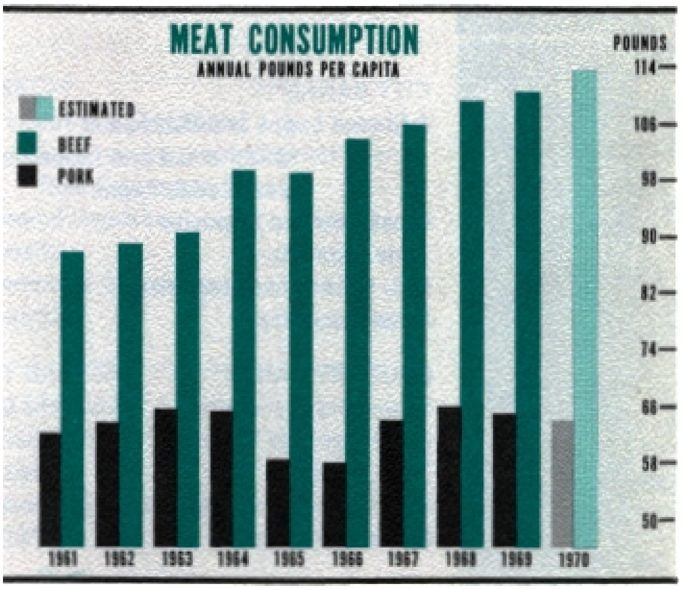
LIVESTOCK PRICES REMAIN RELATIVELY HIGH; BEEF CONSUMPTION CONTINUES TO INCREASE

Average livestock prices at country buying points in the Ninth District remained relatively high at midyear, although prices for both cattle and hogs had retreated from peaks achieved in the early months of 1970. During 1969 and the first half of 1970, livestock prices increased faster and fluctuated more sharply than in the previous three years.

Hog prices continued their year-long climb through the first two months of 1970 due to light hog marketings. This reduction in hogs brought to market also increased farm inventories. In March, marketings rose with a consequent drop in both hog prices and farm-held inventories. By May, hog prices had returned to mid-1969 levels. The small May to June rise in hog prices was entirely seasonal.



Hog farrowings in the first half of this year were substantially above the level of the preceding half year, and this trend is expected to continue during the remainder of 1970. The price depressing effects of this larger quantity of hogs was reflected in the more than seasonal decline of prices in March, April and May of this year. Hog prices may well decline more than seasonally for the remainder of the year as the greater quantity of hogs resulting from increased farrowings are marketed.



Per capita annual consumption of pork over the decade has fluctuated between 58 and 66 pounds, but the trend has essentially been flat. From a peak of 66 pounds per person a year in 1968, pork consumption is estimated to decline to between 63 and 64 pounds per capita this year.

Cattle prices reached a peak earlier than usual this year and began to edge downward in May, as the quantity of beef brought to slaughter rose above 1969 levels. The increase in beef slaughter this year has mainly been due to heavier slaughter weights rather than increased numbers. A seasonal price decline in cattle prices is expected for the remainder of 1970 which will be smaller than last year's seasonal effect because of continuing high demand for beef.

Increased demand for beef has been a major factor in the relatively high level of beef prices. Per capita consumption of beef has increased steadily in recent years. The rising consumer preference for beef combined with the population growth rate of the nation will probably lead to a continued vigorous expansion in beef demand.

NINTH DISTRICT income and finance

INDICATOR		UNIT	1970 JULY	1970 JUNE	1970 MAY	1969 JUNE	Percent Change JUNE-JUNE
MEASURES OF CONSUMER INCOME & FINANCIAL POSITION	Total Personal Income*						
	Nonagricultural Personal Income*						
	Average Weekly Earnings in Manufacturing[1]	Dollars	n.a.	139.25e	139.76e	136.10	+ 2.3
	Consumer Installment Credit Outstanding[2]	Million $	n.a.	1,361	1,337	1,294	+ 5.2
	Time and Savings Deposits at Member Banks	Million $	n.a.	4,913	4,866	4,815	+ 2.0
	Savings Balances at Savings & Loan Assoc.[3]	Million $	n.a.	n.a.	3,442	3,310	
	Cash Farm Receipts[3]	Million $	n.a.	n.a.	238	253	
MEASURES OF FINANCIAL CONDITION OF MEMBER BANKS	CITY BANKS[4,5]						
	Adjusted Loans and Discounts[6]	Million $	2,449	2,447	2,348	2,309r	+ 6.0
	Commercial and Industrial Loans	Million $	1,080	1,081	1,014	1,066	+ 1.4
	Real Estate Loans	Million $	458	457	457	448r	+ 2.0
	Gross Demand Deposits	Million $	2,008	1,923	1,855	1,924r	- 0.1
	Time Deposits	Million $	1,301	1,199	1,192	1,347	- 11.0
	U.S. Government Securities	Million $	368	312	324	312r	
	Other Securities	Million $	474	502	512	572r	-12.2
	COUNTRY BANKS[4,7]						
	Loans and Discounts	Million $	3,305	3,729	3,672	3,419	+ 9.1
	Gross Demand Deposits	Million $	1,931	2,090	2,078	2,101	- 0.5
	Time Deposits	Million $	3,360	3,713	3,674	3,473	+ 6.9
	U.S. Government Securities	Million $	909	922	928	994	- 7.3
	Other Securities	Million $	951	1,079	1,073	1,017	+ 6.1
MEASURES OF RESERVE POSITION AND "LIQUIDITY" OF MEMBER BANKS	Total Reserves[8]	Million $	688	667	672	674	- 1.0
	Required Reserves	Million $	678	659	666	664	- 0.8
	Excess Reserves	Million $	10	8	6	10	-20.0
	Borrowings from FRB	Million $	35	62	17r	19	+226.3
	Ratio of Loans to Total Deposits—City Banks[4]	Percent	76.0	80.3	78.7	72.3	+ 11.1
	Ratio of Loans to Total Deposits—Country Banks[4]	Percent	62.5	64.3	63.8	61.3	+ 4.9
MEASURES OF PRICE LEVELS	Consumer Price Index[9]—Minneapolis	Index, sa	n.a.	n.a.	n.a.	n.a.	
	Prices Received by Farmers[9]—Minnesota	Index, sa	n.a.	125	124	127	- 1.6

NOTES

e—Partially estimated; all data not available

n.a.—Not available

p—Preliminary; subject to revision

r—Revised

sa—Seasonally adjusted data

*—U.S. and District do not have comparable data

saar—Seasonally adjusted annual rate

FOOTNOTES

1. Excluding Northwestern Wisconsin
2. All commercial banks, estimated by a sample of banks
3. Excluding Northwestern Wisconsin and Upper Michigan
4. Last Wednesday of the month figures
5. City Banks—Selected banks in major cities
6. Net loans and discounts less loans to domestic commercial city banks
7. Country Banks—All member banks excluding the selected major city banks
8. Average of daily figures of the four or five weeks ending on Wednesday which contain at least four days falling within the month
9. Index: 1957-59 Base Period

UNITED STATES income and finance

Percent Change JUNE-JUNE	1970 JULY	1970 JUNE	1970 MAY	1969 JUNE	UNIT	INDICATOR	
+ 7.0		798.8p	799.8	746.2	Billion $, saar	Total Personal Income	MEASURES OF CONSUMER INCOME & FINANCIAL POSITION
+ 7.2		776.5p	777.1	724.3r	Billion $, saar	Nonagricultural Personal Income	
+ 3.3		134.40p	132.93	130.06r	Dollars	Average Weekly Earnings in Manufacturing	
+ 5.4		41.0	40.5	38.9	Billion $	Consumer Installment Credit Outstanding[2]	
- 1.3		155.6	155.0	157.6	Billion $	Time and Savings Deposits at Member Banks	
+ 2.8		138.6	136.8	134.8	Billion $	Savings Balances at Savings & Loan Assoc.	
		n.a.	3.3	3.4	Billion $	Cash Farm Receipts	
						CITY BANKS[4,5]	MEASURES OF FINANCIAL CONDITION OF MEMBER BANKS
- 0.2		169.7	167.7	170.0	Billion $	Adjusted Loans and Discounts[6]	
+ 1.5		79.6	77.8	78.4	Billion $	Commercial and Industrial Loans	
+ 0.6		33.5	33.5	33.3	Billion $	Real Estate Loans	
+ 1.5		130.5	130.6	128.6	Billion $	Gross Demand Deposits	
- 4.1		99.7	99.5	104.0	Billion $	Time Deposits	
- 4.0		21.7	22.8	22.6	Billion $	U.S. Government Securities	
+ 1.1		38.0	37.7	37.6	Billion $	Other Securities	
						COUNTRY BANKS[4,7]	
+13.8		62.6	62.0	55.0	Billion $	Loans and Discounts	
+ 0.7		44.3	44.0	44.0	Billion $	Gross Demand Deposits	
+ 4.3		55.9	55.6	53.6	Billion $	Time Deposits	
- 7.8		15.3	15.5	16.6	Billion $	U.S. Government Securities	
+ 5.3		19.9	19.7	18.9	Billion $	Other Securities	
+ 0.6		27,475p	27,874	27,318	Million $	Total Reserves[8]	MEASURES OF RESERVE POSITION AND "LIQUIDITY" OF MEMBER BANKS
+ 1.2		27,317p	27,708	26,997	Million $	Required Reserves	
-50.8		158p	166	321	Million $	Excess Reserves	
-43.2		801p	984	1,411	Million $	Borrowings from FRB	
+ 1.6		76.6	75.6	75.4	Percent	Ratio of Loans to Total Deposits—City Banks[4]	
+ 11.0		62.5	62.3r	56.3	Percent	Ratio of Loans to Total Deposits—Country Banks[4]	
+ 6.0		135.2	134.6	127.6	Index, sa	Consumer Price Index[9]	MEASURES OF PRICE LEVELS
- 0.9		116	117r	117	Index, sa	Prices Received by Farmers[5]	

SOURCES

PERSONAL INCOME: U.S. Department of Commerce, Office of Business Economics

SAVINGS AND LOAN ASSOCIATIONS: Federal Home Loan Bank Board

CASH RECEIPTS FROM FARM MARKETINGS: U.S. Department of Agriculture

FINANCIAL DATA OF MEMBER BANKS: Federal Reserve Bank of Minneapolis and Board of Governors of F. R. System

CONSUMER PRICE INDEX: U.S. Department of Labor, Bureau of Labor Statistics

PRICES RECEIVED BY FARMERS: U.S. Department of Agriculture and Minnesota Farm Price Report

NINTH DISTRICT production and employment

INDICATOR		UNIT	1970 JUNE	1970 MAY	1969 JUNE	Percent Change JUNE-JUNE
MEASURES OF PRODUCTION AND FACTOR INPUTS TO PRODUCTION	Total Industrial Production*					
	Electrical Energy Consumption: Mfg. and Mining[1]	Index, sa	264	262	255	+ 3.5
	Production Worker Manhours:[1]	Index, sa	120p	120	127	- 5.5
	Manufacturing	Index, sa	128p	129	137	- 6.6
	Mining	Index, sa	78p	80	77	+ 1.3
	Total Construction Contracts Awarded	Million $, sa	n.a.	144.7	144.2	
	Residential Buildings	Million $, sa	n.a.	52.7	53.3	
	Nonresidential Buildings	Million $, sa	n.a.	45.5	55.6	
	All Other Construction	Million $, sa	n.a.	46.5	35.3	
	Bldg. Permits: New Housing Units[2]	Number	2,868	2,939	3,806r	-24.7
MEASURES OF MANPOWER UTILIZATION	Civilian Work Force[3]	Thousands, sa	2,549p	2,562	2,513	+ 1.4
	Total Civilian Employment	Thousands, sa	2,427p	2,437	2,427	
	Number Unemployed	Thousands, sa	122p	125	86	+41.9
	Unemployment Rate[3]	Percent, sa	4.8p	4.9	3.4	+41.2
	Average Weekly Hours in Manufacturing[3]	Hours, sa	39.9e	40.5e	41.3	- 3.4
EMPLOYMENT BY INDUSTRY SECTOR	Wage and Salary Employment, Nonfarm[3]	Thousands, sa	1,896p	1,913	1,895	+ 0.1
	Manufacturing	Thousands, sa	380p	386	393	- 3.3
	Mining	Thousands, sa	31p	31	31	
	Construction	Thousands, sa	87p	84	99	-12.1
	Transport., Comm., & Public Utilities	Thousands, sa	132p	132	132	
	Trade	Thousands, sa	460p	466	454	+ 1.3
	Finance, Insurance & Real Estate	Thousands, sa	88p	89	86	+ 2.3
	Service Industries	Thousands, sa	310p	314	305	+ 1.6
	Government	Thousands, sa	408p	411	395	+ 3.3
MEASURES OF SPENDING	Total Retail Sales*					
	New Passenger Car Registrations	Thousands, sa	n.a.	n.a.	22.3	
	Bank Debits[4]	Billion $, saar	160.1	174.7	140.3	+14.1

NOTES

e – Partially estimated; all data not available
n.a. – Data not available
p – Preliminary; subject to revision
r – Revised
sa – Seasonally adjusted data
* – U.S. and District do not have comparable data
saar – Seasonally adjusted annual rate

FOOTNOTES

1. Index: 1957-59 Base Period
2. A sample of permit issuing centers
3. Excluding Northwestern Wisconsin
4. Six standard metropolitan statistical areas
5. A sample of centers blown up to represent total permits issued
6. 226 centers excluding the seven leading centers

UNITED STATES production and employment

Percent Change JUNE-JUNE	1970 JUNE	1970 MAY	1969 JUNE	UNIT	INDICATOR	
- 2.9	169p	169	174	Index, sa	Total Industrial Production	MEASURES OF PRODUCTION AND FACTOR INPUTS TO PRODUCTION
					Electrical Energy Consumption: Mfg. and Mining*	
- 6.8	110p	111p	118	Index, sa	Production Worker Manhours:[1]	
- 7.4	113p	114p	122	Index, sa	Manufacturing	
- 1.2	80p	81p	81	Index, sa	Mining	
+ 1.7	5,798.9	4,372.7	5,703.2	Million $, sa	Total Construction Contracts Awarded	
-12.5	1,903.8	1,740.9	2,175.6	Million $, sa	Residential Buildings	
-18.1	1,783.1	1,423.2	2,177.3	Million $, sa	Nonresidential Buildings	
+56.4	2,112.0	1,208.6	1,350.3	Million $, sa	All Other Construction	
+ 5.1	132.8p	125.9	126.4	Thousands	Bldg. Permits: New Housing Units[5]	
+ 2.0	82,125p	82,555	80,504	Thousands, sa	Civilian Work Force	MEASURES OF MANPOWER UTILIZATION
+ 0.6	78,225p	78,449	77,741	Thousands, sa	Total Civilian Employment	
+41.2	3,900p	4,106	2,763	Thousands, sa	Number Unemployed	
+38.2	4.7p	5.0	3.4	Percent, sa	Unemployment Rate	
- 2.2	39.8p	39.8	40.7	Hours, sa	Average Weekly Hours in Manufacturing	
+ 0.5	70,666p	70,881	70,347r	Thousands, sa	Wage and Salary Employment, Nonfarm	EMPLOYMENT BY INDUSTRY SECTOR
- 3.9	19,460p	19,580	20,248r	Thousands, sa	Manufacturing	
- 0.3	612p	619	614r	Thousands, sa	Mining	
- 3.4	3,325p	3,359	3,442r	Thousands, sa	Construction	
+ 1.2	4,499p	4,479	4,445r	Thousands, sa	Transport., Comm., & Public Utilities	
+ 2.2	14,968p	14,976	14,647r	Thousands, sa	Trade	
+ 3.0	3,663p	3,679	3,556r	Thousands, sa	Finance, Insurance & Real Estate	
+ 3.6	11,571 p	11,577	11,174r	Thousands, sa	Service Industries	
+ 2.8	12,568p	12,612	12,221 r	Thousands, sa	Government	
	n.a.	30,324p	29,371	Million $, sa	Total Retail Sales	MEASURES OF SPENDING
	n.a.	n.a.	794.4	Thousands, sa	New Passenger Car Registrations	
+ 8.8	3,334.6	3,309.0r	3,064.7r	Billion $, saar	Bank Debits[6]	

SOURCES

INDUSTRIAL PRODUCTION: Board of Governors of F.R. System

INDUSTRIAL USE OF ELECTRIC POWER: Federal Reserve Bank of Minneapolis

PRODUCTION WORKER MANHOURS: Federal Reserve Bank of Minneapolis

CONSTRUCTION CONTRACTS AWARDED: Board of Governors of of F. R. System, F. W. Dodge Corporation data

NEW HOUSING UNITS AUTHORIZED: Federal Reserve Bank of Minneapolis and U.S. Department of Commerce, Bureau of Census

BANK DEBITS: Board of Governors of F. R. System

EMPLOYMENT, UNEMPLOYMENT, HOURS AND WAGES:
Employment Security Departments; Minnesota, North Dakota, South Dakota, Montana, Michigan, and U.S. Department of Labor, Bureau of Labor Statistics

RETAIL SALES: U.S. Department of Commerce, Bureau of Census

NEW PASSENGER CAR REGISTRATIONS: Automotive News Magazine

AGRICULTURAL CREDIT CONDITIONS SURVEY

AG BANKS' LIQUIDITY TIGHTENS MORE

Agricultural banks in the Ninth District again appear to be experiencing a tightening of their liquidity positions.

Several factors in the recent survey suggest this change. Loan-to-deposit ratios were higher than on the previous survey. A shortage of loan funds in combination with stronger loan demand seem to have caused this pressure. Rural banks expect problems in meeting loan requests in the next three months. Nineteen percent of the respondent banks anticipate problems in meeting loan requests this quarter compared to 18 percent in the April survey. One year ago, only 11 percent had expected this problem.

Banks reporting that they reduced or refused a loan due to a fund shortage increased from 23 percent last quarter to 32 percent this quarter. Only 18 percent had reported such action one year ago. All of these figures represent new peaks, up from the record-setting highs of last quarter. A new low of 32 percent of the respondent banks reported actively seeking new farm loans this quarter.

A measure of the increases in loan-to-deposit ratios is found in the way bankers rated their current ratios with respect to "normal bank operations." A record high 47 percent of the respondent banks reported that their loan-to-deposit ratio was "high" with respect to normal bank operations. The previous peak was 32 percent recorded in the April survey. Also, a new low of 5 percent indicated a low loan-to-deposit ratio. Last quarter, 15 percent reported a low ratio.

Current pressure on agricultural banks' liquidity positions is being maintained by demand for short-term loans. On this survey, 31 percent of the respondent banks indicated "greater than usual" demand for short-term loans, while 20 percent on the April survey and 14 percent one year ago had reported this type of demand. According to comments, this high demand is due to some increase in capital purchases by farmers and lack of advanced acreage diversion payments under the Feed Grain Program. Increased operating costs and high feeder cattle prices have also contributed to increased demand for short-term credit, according to comments of some rural banks.

Despite more pressure on loanable funds, there is some evidence that the increase in interest rates on short-term loans is slowing. In this survey, only 39 percent of the banks reported that the movement in short-term interest rates was "upward." On the April survey, 59 percent of the respondent banks indicated a rise, while 91 percent had expected this trend one year ago.

Responses indicate that overall current farm earnings are about the same compared with a year ago. Sixty percent of the respondents on this survey indicate they expect farm earnings to be "about the same" in the next three months.

GRAIN INCOME EXPECTED TO BE LOWER

Agricultural banks expect farm income in grain areas to be lower than usual, according to their comments. Crops in the Red River Valley were seeded late due to excessive moisture during the planting season. Some crops were reseeded, and recent hot weather dried topsoil. As a result, production will be below normal in this area. Excessive spring moisture in many other areas delayed seeding but helped crops get off to a good start. Overall, grain production is expected to be average.

Milk and livestock prices are at higher levels than last year. Respondent banks in livestock areas indicate that they expect farmers to have relatively higher income this fall if these prices remain at high levels.

According to responses on this survey, more farmers are at their debt limit; 26 percent of the rural banks categorized the current situation compared with a year ago as "more at debt limit." On the April survey, 17 percent indicated that more farmers were at their limit than a year earlier, while 16 percent had indicated this on the survey one year ago. Rural bank comments indicate that some farm real estate loans are being referred to nonbank credit agencies. Some short-term loans are being refinanced by long-term lenders.

The current rate of farm debt repayments is slower than usual. Respondent banks indicating a "slow" rate of repayment rose from 14 percent on the April survey to 16 percent on this survey. One year ago, only 11 percent had indicated a "slow" rate.

SHIFT-AND-SHARE ANALYSIS

A paper entitled "An Inquiry into Shift-and-Share Analysis with Application to the Ninth Federal Reserve District," (approx. 60 pp.) has recently been printed by the Research Department of this Bank. Shift-and-Share is a method of rearranging economic data in order to analyze the causes of economic growth within a region. This paper explains the method, its variations, and its limitations. Some data on growth of various industries in this District are included. It is available upon request to the Research Department, Federal Reserve Bank, Minneapolis, Minnesota 55480.

august 1970 supplement
NINTH DISTRICT CONDITIONS
federal reserve bank of minneapolis

Preliminary results from the 1970 Census of Population, which was taken on April 1, reveal some very intriguing facts about recent changes and shifts in the population of the Ninth Federal Reserve District.[1] Between 1960 and 1970, population growth slowed dramatically, increasing only 6.0 percent after having advanced 11.5 percent in the previous decade. All four complete district states experienced this slowdown, with the smallest relative decline occurring in Minnesota and the largest in Montana. The district's 1960-70 growth in population is less than half the national gain of 13.4 percent.

This slowing in district population growth can partially be attributed to a continued out-migration from all district states. Although the excess of births over deaths increased the district's population by 654,500, 331,900 more people moved out of the district than moved into it. Therefore, the population actually increased by only 322,600.

Net out-migration in the district during the last ten years was up 20.0 percent over the previous decade. This was largely because of the shift of people from agricultural to urban areas.

This increase in the district's rate of out-migration, however, accounts for only one-fourth of the slowing in district population growth in the last decade. The remainder can be traced to a decline in birth rates throughout the district, a phenomenon which was also noted nationwide. While the national birth rate averaged 24.8 births per thousand persons between 1950 and 1960, following a decade of general decline, it reached 17.7 births per thousand persons in 1969. The Ninth District's drop was even sharper. During the 1950's, the birth rate in all four district states exceeded that for the nation; but in 1969, only the birth rate of North Dakota surpassed it. Minnesota's 1969 birth rate equaled the nation's, but both Montana and South Dakota had birth rates below it.

[1]When this report was written, census data were only available for Minnesota, Montana, North Dakota, and South Dakota. Consequently, the upper Peninsula of Michigan and northwestern Wisconsin are not included in the analysis.

The 1970 Census of Population also discloses information on the rate of urbanization in the district, which is the shift in population from rural to urban areas.[2] Whereas 47.0 percent of the district's population lived in rural areas in 1950, only 37.0 percent reside there today. The proportion of the district's population living in cities with populations between 2,500 and 50,000 has remained relatively constant during the last 20 years, but the percent residing in standard metropolitan statistical areas has advanced from 33.0 percent in 1950 to 42.0 percent in 1970.

In the last ten years, 49 percent of the district's 264 counties lost ten percent or more of their population, and 24 percent experienced smaller population losses. Only 28 percent of the district's counties gained population, with only 14 percent gaining ten percent or more.

Although urbanization is occurring in all district states, the degree of urbanization varies considerably. In Minnesota, approximately 71 percent of the population lives in urban areas; in Montana, 54 percent; in South Dakota, 46 percent; and in North Dakota, 43 percent.

Another evident population shift is the movement of people from the built-up central cities in metropolitan areas to their neighboring suburbs and countryside. This trend is certainly occurring in the Twin Cities' seven-county area; today, 60 percent of the Twin Cities' population reside in the suburbs, whereas only 30 percent lived there in 1950. Minneapolis' relative share of population during this period fell from 44 to 23 percent while St. Paul's dropped from 26 to 17 percent. The population in both cities declined during the last ten years.

[2]For the purpose of this presentation, rural areas include all unincorporated areas and cities with less than 2,500 residents outside of the district's standard metropolitan statistical areas in 1970.

This supplement was prepared by David S. Dahl, Associate Economist, Research Department.

POPULATION GROWTH SLOWS IN DISTRICT. . . . . . IN BOTH URBAN AND RURAL AREAS

POPULATION CHANGE

STATE OR AREA	(THOUSANDS OF PERSONS) 1950	1960	1970	PERCENT CHANGE 1960/1950	1970/1960
MINNESOTA	2,982.5	3,413.9	3,770.0	+14.5	+10.4
MONTANA	591.0	674.8	682.1	+14.2	+1.1
NORTH DAKOTA	619.6	632.4	610.6	+2.1	-3.4
SOUTH DAKOTA	652.7	680.5	661.4	+4.3	-2.8
NINTH DISTRICT	4,845.9	5,401.6	5,724.2	+11.5	+6.0
UNITED STATES	152,271.0	180,684.0	204,840.0	+18.7	+13.4

POPULATION GROWTH
1950 - 1970

TYPE OF AREA	PERCENT CHANGE 1950 - 1960	1960 - 1970
URBAN AREAS	24	13
METROPOLITAN AREAS	27	17
CITIES 2,500 TO 50,000	19	7
CITIES 10,000 TO 50,000	20	8
CITIES 2,500 TO 10,000	16	5
RURAL AREAS	-3	-5
TOTAL	12	6

NET OUT—MIGRATION ABSORBS MUCH OF NATURAL POPULATION INCREASE

POPULATION BALANCE SHEET
(THOUSANDS OF PERSONS)

	MINNESOTA	MONTANA	NORTH DAKOTA	SOUTH DAKOTA	NINTH DISTRICT
POPULATION 1960	3,413.9	674.8	632.4	680.5	5,401.6
PLUS: BIRTHS 1960 - 1970	743.7	143.3	136.2	143.5	1,166.7
MINUS: DEATHS 1960 - 1970	325.8	65.8	55.3	65.7	512.1
PLUS: MIGRATION 1960 - 1970	-61.8	-70.1	-102.6	-97.4	-331.9
EQUALS: POPULATION 1970	3,770.0	682.1	610.6	661.4	5,724.2

NET OUT—MIGRATION RISES SHARPLY WHILE NATURAL GROWTH SLOWS

NET MIGRATION (IN THOUSANDS OF PERSONS)

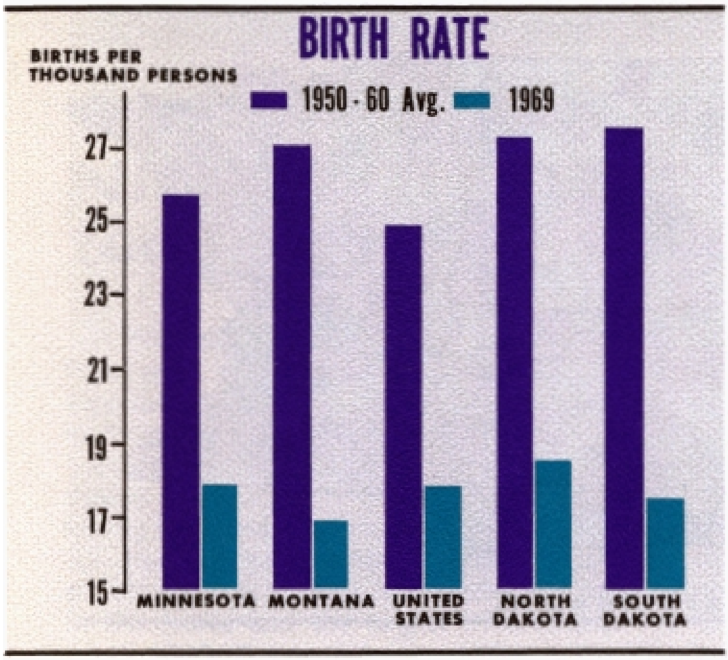
STATE	1950 - 1960	1960 - 1970
MINNESOTA	-53	-62
MONTANA	-32	-70
NORTH DAKOTA	-99	-103
SOUTH DAKOTA	-93	-97
NINTH DISTRICT	-277	-332

NATURAL INCREASE (IN THOUSANDS OF PERSONS)

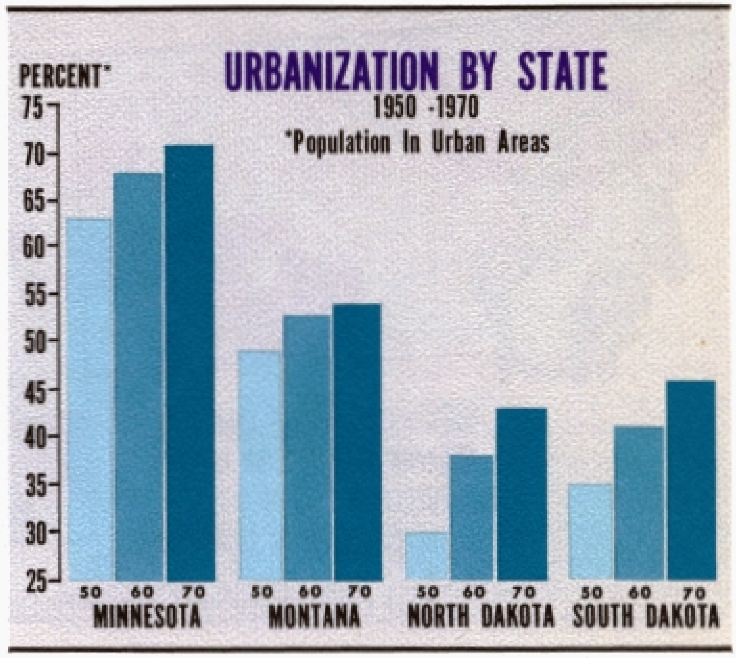
STATE	1950 - 1960	1960 - 1970
MINNESOTA	473	418
MONTANA	108	78
NORTH DAKOTA	116	81
SOUTH DAKOTA	122	78
NINTH DISTRICT	819	655

The above graphs depict the important role that out-migration has played in the population changes that have taken place in the Ninth District during the past decade. The highest rates of out-migration have occurred in the Dakotas. Between 1960 and 1970, North Dakota lost 102,600 people, while in South Dakota 97,400 more people moved out of the state than moved into it. For Montana the net population loss due to out-migration amounted to 70,400 people, and in Minnesota 61,800 more people moved out of the state than moved into it. While this out-migration has been a major factor, the decline in birth rates has also played a significant part in the slowdown in the district's population growth in the last decade.

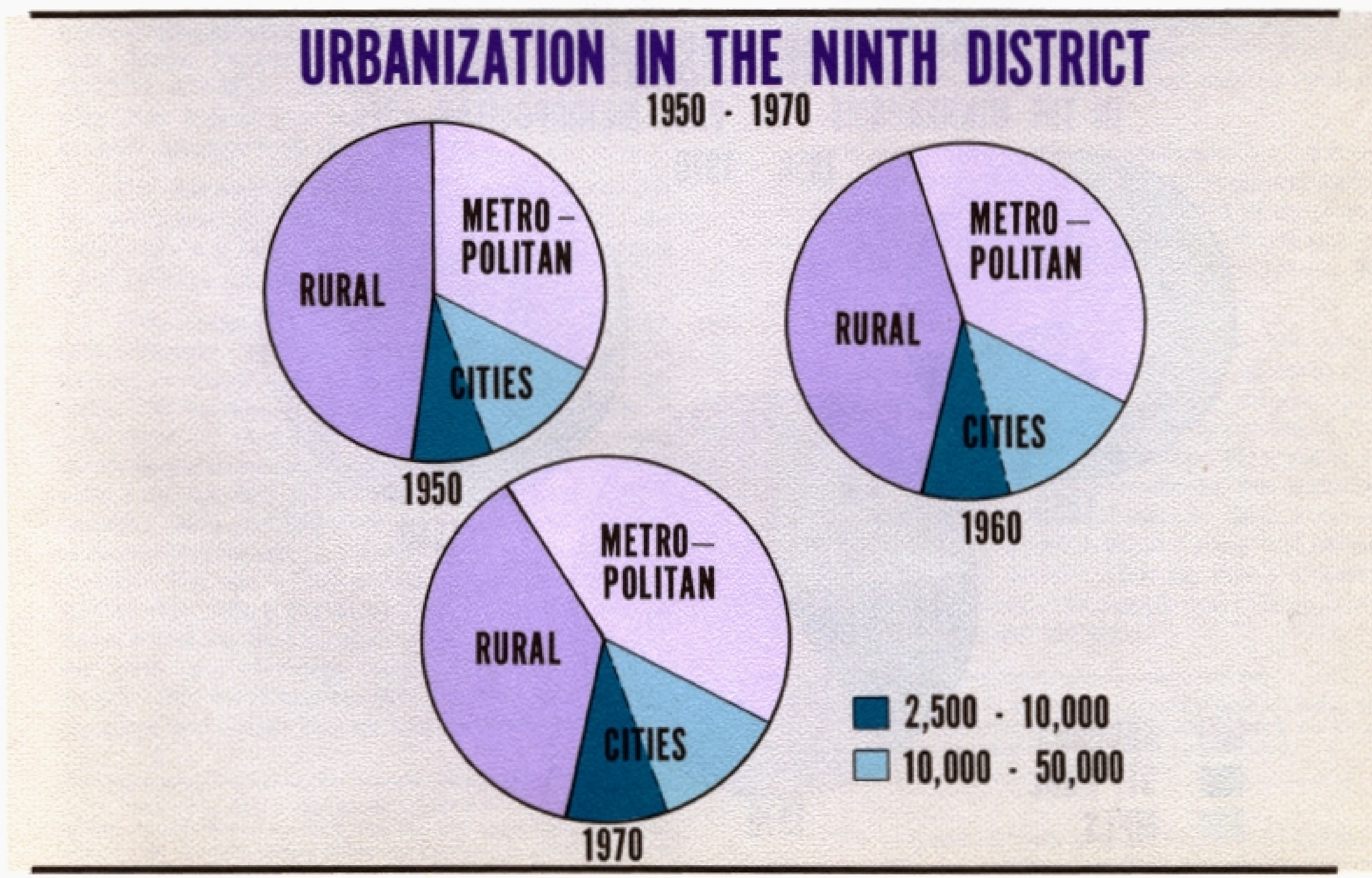
DROPS IN DISTRICT BIRTH RATES EXCEED NATIONAL DECREASE



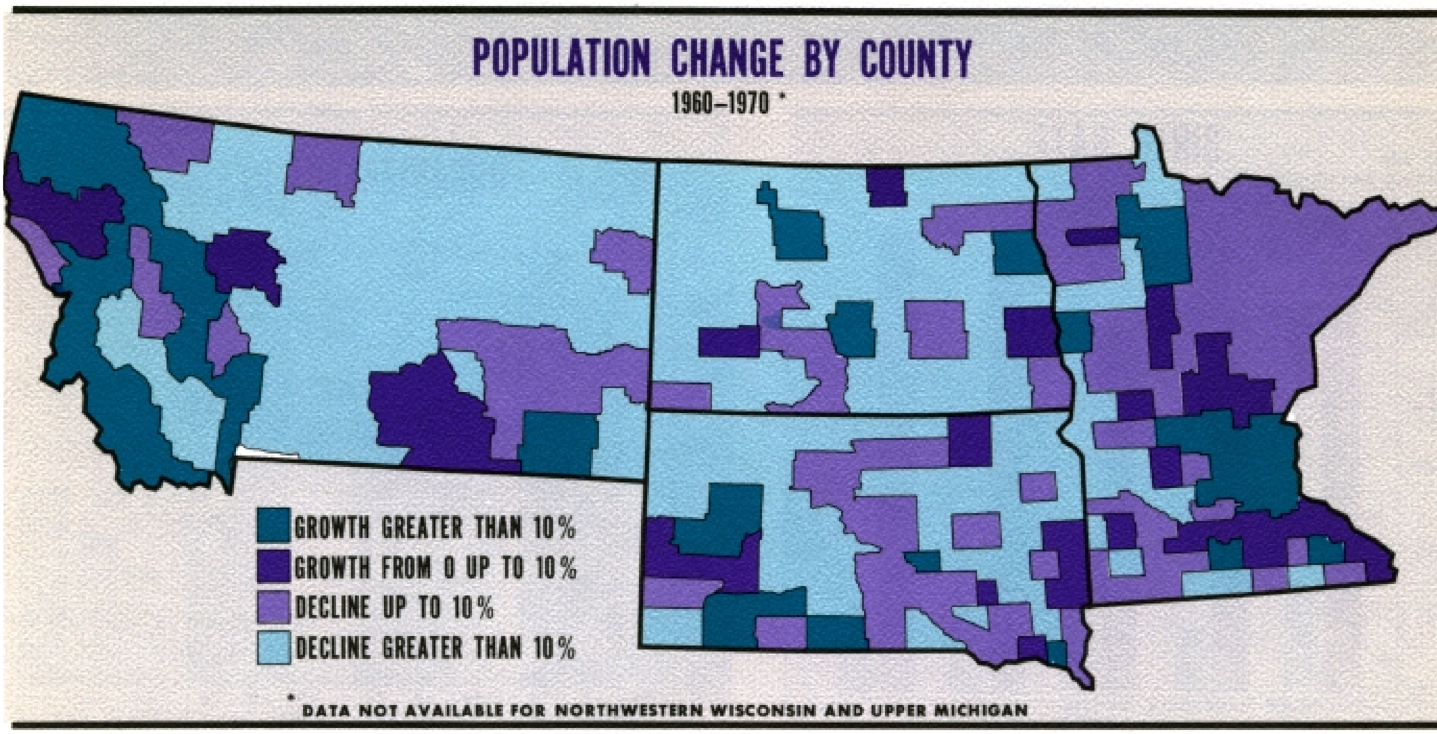
URBANIZATION ACCELERATES MOST RAPIDLY IN THE DAKOTAS . . .



BUT IS A PHENOMENON COMMON TO ENTIRE DISTRICT



POPULATION LOSSES ARE EVIDENT IN RURAL COUNTIES



SUBURBS GAIN AT THE EXPENSE OF CENTRAL CITIES