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ECONOMIC GROWTH IN MINNESOTA COMPARED TO NEIGHBORING STATES AND THE U.S.

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ECONOMIC GROWTH IN MINNESOTA: COMPARED TO NEIGHBORING STATES AND THE U.S.

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It is often correctly reported that Minnesota's population has been and is growing at a lower rate than the U.S. as a whole. It is also often incorrectly reported that Minnesota's personal income and per capita personal income have been growing at a lower rate. Much has been made of the fact that per capita personal income in Minnesota has been lower than for the nation as a whole. It has been lower but it has grown faster and it has, at least temporarily, overtaken the U.S. average. The usual image that has been projected is that Minnesota's economy is lagging. It is not an accurate image.

The relevant statistics for Minnesota are compared below with those of other Plains States (Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas), with adjoining Wisconsin, and the U.S. as a whole in Tables 1-8 at the end of this paper.

Minnesota's personal income increased 1,055% from the 3 year average, 1927-29, to the 3 year average, 1971-73, compared to an increase of 1,051% for the U.S. as a whole. The rate of growth from the mid-fifties to 1971-73 was also greater for Minnesota than for the U.S.; 226% and 221%, respectively, as was the case comparing the 3 year average 1968-70 with the 3 year average 1971-73, 27.51% and 26.75%, respectively. (See Table 1). Minnesota's growth is especially good considering the fact that it has more than its proportionate share of farmers (whose incomes are lower than urban incomes) and it experienced net out-migration which added personal income in other states while subtracting it from Minnesota. But why did Minnesota experience out-migration? Out-migration occurred because of sharp reduction in the number of farmers all over the country as farmers flocked to urban

areas. Minnesota's cities absorbed most of its rural migrants but not all of them. Farming is (and has been) relatively more important in Minnesota than in the U.S. as a whole. In 1929, Minnesota's farm income accounted for 13.9% of its personal income while such income accounted for 6.9% of U.S. personal income. These figures declined to 4.60% and 2.38% by 1970. All of the states which had relatively more than their share of farmers experienced net out-migration except Virginia, which is a special case because of spill over of population from Washington, D. C. The more important farming is in a state, the greater the out-migration. Wisconsin and all the other Plains States, except Missouri, experienced a greater rate of out-migration than did Minnesota and all had a smaller rate of increase in personal income than did Minnesota.

Growth in personal income per capita is a better measure of welfare than the increase in total personal income. It is increasing income per capita that measures material well-being. Table 2 reveals that per capita personal income in Minnesota increased 656% between the 3 year period 1927-29 and the 3 year period 1971-73 while it increased 563% in the U.S. as a whole. Per capita income in Minnesota increased from $598 in 1929 to $4,921 in 1973 while per capita income for the U.S. as a whole increased from $703 to $4,918. Minnesota's per capita income gained both absolutely and relatively. The (short run) spurt in farm income has brought Minnesota's per capita income, at least temporarily, above the U.S. average. Of the 7 Plains States and Wisconsin, Minnesota had the highest per capita income for the 1971-73 period and the single year 1973, except for Kansas. In the 1927-29 period, 2 states of the 8

in the area, namely Wisconsin and Missouri, had a higher per capita income than Minnesota; in the 1953-55 period, 3 states, Wisconsin, Missouri, and Kansas, had a higher per capita income; in the period 1968-70 and the period 1971-73, only Kansas had a higher per capita income.

Average weekly wages in manufacturing are greater in Minnesota than the national average and manufacturing payrolls in Minnesota have been growing faster than the national average. Such payrolls increased 1,424% in Minnesota between 1929 and 1972 while the U.S. manufacturing payrolls increased 993%. Of the neighboring states, only Kansas and Iowa had more rapid growth in manufacturing.

Between 1970 and 1971, manufacturing payrolls in Minnesota dropped while such payrolls increased in each of the neighboring states and in the U.S. as a whole. This drop is due to the national policy changes which sharply reduced the demand for electronics equipment which is a substantial part of Minnesota's manufacturing. Recall how hard Honeywell was hit by the change! Between 1971 and 1972 manufacturing payrolls increased faster in Minnesota than the national average though not as fast as in neighboring states. (See Table 3).

Employment in manufacturing in Minnesota grew more than twice as rapidly as it did in the U.S. as a whole whether we measure the rate of growth from 1940 to 1972, 1950 to 1972, or 1960 to 1972. The rate of growth in such employment was also generally higher than in neighboring states. Since 1960, only the Dakotas, among the 8 states of the area, experienced a more rapid rate of growth in manufacturing employment than

Minnesota. It is often alleged that Minnesota's favorable rate of growth is due to its having a small base to start from. This argument loses its punch when one notices that 5 of the other Plains States have a lower base than Minnesota but only 2 of them grew at a more rapid rate. (See Table 4). Half of the severe drop in manufacturing employment in Minnesota between 1970-71 is accounted for by the decline in employment in the electrical machinery industry. Between 1971 and 1972, manufacturing employment in Minnesota increased again, faster than the national average but not as fast as its neighbors.

However, the electrical machinery industry has fully recovered since then. Between 1972 and 1973, total manufacturing employment increased more than 8% in Minnesota while it increased less than 5% nationwide. (See Table 5)

According to the Department of Commerce the nonfarm income figures are a better statistical series for estimating trends than is personal income because they abstract from the volatility of--and waning relative importance of--farm income. Nonfarm income in Minnesota increased 1,142% between 1929 and 1972 while the U.S. nonfarm income increased 1,062%. Minnesota's rate of increase was higher than that for any of the neighboring states except North Dakota. For the more recent period 1950-72, Minnesota's nonfarm income grew faster than all its neighbors. (See Table 6). Again the record for Minnesota for 1970-72 is less satisfactory. But note the recovery since 1972 in Table 5.

Farm income is more volatile than nonfarm income. This explains why the Department of Commerce uses three year averages when comparing states in economic performance that includes agriculture. A state's

personal income may compare very favorably with other states in a particular year (or very unfavorably) simply because it has a very good crop year (or a very bad one). Between the years 1949-51 and 1970-72, Minnesota's realized net farm income grew faster (40%) than the national average (28%). Among the other Plains States and Wisconsin, farm income grew faster than Minnesota in 4 states and more slowly in the remaining 3. See Table 7.

The declining significance of the fact that agriculture is relatively important in Minnesota and the rapid longer term growth in such growth industries as electronics and other industries that require highly skilled and professional labor suggest that Minnesota's prospects for growth at a rate greater than average are good. This goes for growth in total personal income, despite continued out-migration, (if it continues) as well as for growth in farm income, nonfarm income and per capita personal income.

Whether we measure growth by total personal income, per capita personal income, manufacturing payrolls, employment in manufacturing, nonfarm income, or farm income, Minnesota's rate of growth is faster than the national average. There is simply no substance to the allegation that Minnesota's economy is lagging.

Table 1: Total Personal Income for the U.S., Minnesota, and Neighboring States, 1927-29, 1953-55, 1968-70, 1971-73 compared.

Area	1 1927-29 3 yr average	2 1953-55 3 yr average	3 1968-70 3 yr average	4 1971-73 3 yr average	5 1927-29 to 1971-73	6 percent change 1953-55 to 1971-73	7 1968-70 to 1971-73
		millions of $					
United States	$81,827	$293,779	$743,188	$942,005	1051.22%	220.65%	26.75%
Wisconsin	1,891	6,386	15,285	19,380	924.85	203.48	26.79
Plains States	7,376	24,144	56,489	72,199	878.84	199.03	27.81
Minnesota	1,485	5,255	13,447	17,146	1054.61	226.28	27.51
Iowa	1,354	4,344	9,826	12,512	824.08	188.03	27.34
Missouri	2,195	7,124	16,171	20,505	834.17	187.83	26.80
North Dakota	294	790	1,791	2,535	762.24	220.89	41.54
South Dakota	286	888	1,999	2,559	794.76	188.18	28.01
Nebraska	768	2,190	5,180	6,686	770.57	205.30	29.07
Kansas	995	3,552	8,077	10,256	930.75	188.74	26.98

Source 1: Data for 1927-29 from Personal Income by States, Supplement to Survey of Current Business, Dept. of Commerce, 1956, p. 38 and p. 140.

2: Data for 1953-55, Survey of Current Business, Dept. of Commerce, August, 1969, p. 14.

3. Data for 1968-70, Survey of Current Business, Dept. of Commerce, August 1971, p. 31.

4: Data for 1971-73, Survey of Current Business, Dept. of Commerce, April 1974, p. 17.

Table 2: Per Capita Personal Income for the U.S., Minnesota, and Neighboring States, 1927-29, 1953-55, 1968-70, 1971-73 compared.

Area	1 1927-29 3 yr average	2 1953-55 3 yr average	3 1968-70 3 yr average	4 1971-73 3 yr average	5 1927-29 to 1971-73	6 percent change 1953-55 to 1971-73	7 1968-70 to 1971-73
United States	$682	$1,822	$3,687	$4,525	563.49%	148.35%	22.73%
Wisconsin	653	1,775	3,486	4,285	556.20	141.41	22.92
Plains States	560	1,667	3,487	4,345	675.89	160.65	24.61
Minnesota	584	1,688	3,576	4,413	655.65	161.43	23.41
Iowa	551	1,643	3,495	4,339	687.48	164.09	24.15
Missouri	610	1,748	3,490	4,323	608.69	147.31	23.87
North Dakota	436	1,292	2,890	3,998	816.97	209.44	38.34
South Dakota	418	1,356	2,994	3,764	800.48	177.58	25.72
Nebraska	562	1,629	3,510	4,381	679.54	168.94	24.81
Kansas	535	1,739	3,615	4,527	746.17	160.32	25.23

Source 1: Data for 1927-29 from Personal Income by States Ibid, p. 38, p. 142.

2: Data for 1953-55, Survey of Current Business, August 1969, p. 15.

3: Data for 1968-70, Survey of Current Business, August 1971, p. 31.

4: Data for 1971-73, Survey of Current Business, April 1974, p. 17.

Table 3: Manufacturing Payrolls in Minnesota, Neighboring States, and the U.S. Selected Years. Millions of Dollars

Area	1 1929	2 1948	3 1970	4 1971	5 1972	6 1929 to 1972	7 Percent Change 1948 to 1972	8 Percent Change 1970 to 1972	9 1971 to 1972
United States	$16,092	$46,459	$158,294	$160,519	$175,897	993.07%	278.61%	11.12%	9.58%
Wisconsin	487	1,384	4,291	4,351	4,815	888.71	247.90	12.21	10.66
Plains States	825	2,425	9,804	9,921	10,949	1,227.51	351.51	11.68	10.36
Minnesota	191	582	2,676	2,647	2,911	1,424.08	400.17	8.78	9.97
Iowa	131	437	1,791	1,851	2,083	1,490.08	376.66	16.30	12.53
Missouri	359	981	3,346	3,374	3,651	916.99	272.17	9.12	8.21
North Dakota	6	16	70	75	82	1,266.67	412.50	17.14	9.33
South Dakota	10	32	115	123	138	1,280.00	331.25	20.00	12.20
Nebraska	52	133	608	628	697	1,240.38	424.06	14.64	10.99
Kansas	77	244	1,198	1,222	1,387	1,701.30	468.44	15.78	13.50

Source 1: Personal Income by States, Survey of Current Business, Dept. of Commerce, 1956, p. 140 and pp. 166-75 for 1929 and 1948 data.

2: Survey of Current Business, Department of Commerce, August, 1973, pp. 44-46 for 1970, 1971, and 1972 data.

Table 4: Employment in Manufacturing for the U.S., Minnesota, and Neighboring States, 1940-1970.

	1	2	3	4	5	6
		Employment in Thousands				
Area	1940	1950	1960	1970	1971	1972
United States	10,985	15,241	16,696	19,349	18,529	18,933
Wisconsin	279.7	434.5	460.4	500.9	479.6	493.6
Plains States	554.9	874.0	1,001.4	1,226.2	1,175.2	1,223.2
Minnesota	117.6	200.7	229.7	319.4	299.4	307.5
Iowa	95.6	154.4	176.6	215.5	209.2	223.3
Missouri	247.4	353.8	392.7	446.1	427.1	434.1
North Dakota	4.6	6.1	6.5	9.9	10.2	10.7
South Dakota	8.1	11.6	13.1	15.8	16.5	18.0
Nebraska	30.7	52.1	66.8	85.0	83.0	86.6
Kansas	50.9	95.3	116.0	134.5	129.8	143.0

Source: Handbook of Labor Statistics, 1972, U.S. Dept. of Labor, BLS, Table 38, p. 89 for U.S. total - Table 48 pp. 105-106 for states and regions. 1940, 50, 60 data.

Handbook of Labor Statistics, 1973, U.S. Dept. of Labor, BLS, Table 38, p. 95 for U.S. total - Table 48 pp. 112-113 for states and regions. 1970, 71, 72 data.

Table 4 continued:

	7	8	9	10	11
			Percent Changes		
	1940 to 1972	1950 to 1972	1960 to 1972	1970 to 1972	1971 to 1972
United States	72.35%	24.22%	13.40%	-2.15%	2.18%
Wisconsin	76.47	13.60	7.21	-1.46	2.92
Plains States	120.44	39.95	22.16	- .24	4.08
Minnesota	161.48	53.21	33.87	-3.73	2.71
Iowa	133.58	44.62	26.44	3.62	6.74
Missouri	75.46	22.70	10.54	-2.69	1.64
North Dakota	132.61	74.41	64.62	8.08	4.90
South Dakota	122.22	55.17	37.40	13.92	9.09
Nebraska	182.08	66.22	29.64	1.88	4.34
Kansas	180.94	50.05	23.28	6.32	10.17

Table 5: Employment in Manufacturing Industries, Minnesota and U.S., 1965-1974 (in thousands of persons)

	Minnesota*			Per cent change year to year			U.S.**	
	Total Non-Agri.	Electrical Machinery	Total Mfg.	Total Non-Agri.	Electrical Machinery	Total Mfg.	Total Mfg.	Per Cent Change year to year
1965	1,043.4	19.7	249.6				18,062	
				7.1%	12.2%	9.9%		6.4%
1966	1,117.1	22.1	274.2				19,214	
				5.2	14.9	8.2		1.2
1967	1,175.6	25.4	296.7				19,447	
				3.6	8.7	2.4		1.7
1968	1,217.4	27.6	303.9				19,781	
				4.5	11.2	5.9		2.0
1969	1,271.9	30.7	321.7				20,167	
				2.1	-2.6	-.8		-4.1
1970	1,298.8	29.9	319.1				19,349	
				-1.7	-23.4	-8.9		-4.2
1971	1,277.3	22.9	290.6				18,529	
				4.0	-.4	2.4		2.2
1972	1,328.3	22.8	297.7				18,933	
				6.5	21.5	8.4		4.7
1973	1,414.3	27.7	322.6				19,821	
				4.0	15.9	5.5		--
1974	1,470.2	32.1	340.3				--	

* Minnesota data given for month of April of each year.

** U.S. data given in yearly averages.

1. Minnesota data from Minnesota Employment Trends, Minnesota Department of Employment Services, May 1966-74, p. 4.

2. U.S. Data from Economic Report of the President, Feb. 1974, Table C-29, p. 282.

Table 6. Nonfarm Income in Minnesota, Neighboring States, and the U.S. Selected Years. Millions of Dollars.

Area	1 1929	2 1950	3 1970	4 1971	5 1972	6 1929 to 1972	7 Percent Change 1950 to 1972	8 Percent Change 1970 to 1972	9 1971 to 1972
United States	$78,402	$209,463	$783,186	$838,665	$910,782	1061.68%	334.82%	16.29%	8.60%
Wisconsin	1,747	4,549	16,060	17,085	18,590	964.11	308.66	15.75	8.81
Plains States	5,990	15,919	56,451	60,201	64,795	981.72	307.03	14.78	7.63
Minnesota	1,277	3,613	13,824	14,760	15,862	1142.13	339.03	14.74	7.47
Iowa	1,016	2,706	9,243	9,877	10,649	948.13	293.53	15.21	7.82
Missouri	2,041	5,089	17,027	18,217	19,522	856.49	283.61	14.65	7.16
North Dakota	156	486	1,677	1,787	1,956	1153.85	302.47	16.64	9.46
South Dakota	167	521	1,726	1,836	1,991	1092.22	282.15	15.35	8.44
Nebraska	533	1,390	5,036	5,338	5,757	980.11	314.17	14.32	7.85
Kansas	780	2,114	7,920	8,386	9,058	1061.28	328.48	14.37	8.01

Source 1: Personal Income by States, Survey of Current Business, Dept. of Commerce, 1956, pp. 140 and pp. 166-75 for 1929 and 1950 data.

2: Survey of Current Business, Department of Commerce, August, 1973, pp. 44-46 for 1970, 71, 72 data.

Table 7: Total Net Farm Income in Minnesota, Neighboring States, and the United States, Selected Years. Millions of Dollars

	1	2	3	4	5	6	7	8	9
Area	1949	1950	1951	1949-51 Average	1970	1971	1972	1970-72 Average	Percent Change 1949-51 to 1970-72
United States	12,780	13,673	15,987	14,147	16,913	16,920	20,344	18,059	27.66%
Wisconsin	447.6	436.2	604.3	496.0	698.5	584.7	564.9	616.0	24.19
Plains States	2802.2	3672.1	3728.3	3400.9	4511.6	4389.2	5883 6	4928.1	44.91
Minnesota	493.3	513.7	667.5	558.2	837.6	697.3	812.6	782.5	40.18
Iowa	725.3	1,057.5	1,021.6	934.8	1,273.3	1,031.8	1,639.3	1,314.8	40.65
Missouri	492.1	564.6	570.0	542.2	592.2	598.5	806.0	665.6	22.76
North Dakota	176.3	262.7	246.9	228.6	226.8	364.0	363.4	318.1	39.15
South Dakota	157.8	246.7	340.8	248.4	331.9	363.8	491.5	395.7	59.30
Nebraska	361.6	531.7	471.0	454.8	576.1	582.0	831.3	657.1	44.48
Kansas	395.8	495.2	410.5	433.8	673.7	751.8	939.5	788.3	81.72

Source: Farm Income, State Estimates, 1949 - 1970. A Supplement to Farm Income Situation, USDA, pp 19-40 for 1949-51 data.

Farm Income, State Estimates, 1959-1972, pp. 12-29 for 1970-72 data.

Table 8: Population of Minnesota, Neighboring States, and the U.S. Selected Years. Thousands.

	1	2	3	4	5
				Percent Change	
	1930	1950	1970	1930 to 1970	1950 to 1970
United States	123,203	151,326	204,281	65.81%	34.99%
Wisconsin	2,939	3,435	4,418	50.32	28.62
Plains States	13,297	14,061	16,319	22.73	16.06
Minnesota	2,564	2,982	3,805	48.40	27.60
Iowa	2,471	2,621	2,824	14.29	7.75
Missouri	3,629	3,955	4,677	28.88	18.26
North Dakota	681	620	618	-9.25	-.32
South Dakota	693	653	666	-3.90	1.99
Nebraska	1,378	1,326	1,483	7.62	11.84
Kansas	1,881	1,905	2,247	19.46	17.95

1930, 1950 and 1970 Data from Statistical Abstract of the U.S., 1973, Table No. 14, P. 14.