

Staff Paper Series

STAFF PAPER P72-12

APRIL 1972

Economics Growth in Minnesota:
Compared to Neighboring States

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It is often reported that Minnesota's personal income and population have been growing at a lower rate than the U.S. average and that per capita personal income is, and has been, lower in Minnesota than for the U.S. as a whole. The above is true but incorrect conclusions are drawn from it. The usual inference is that Minnesota's economy is lagging. This is the image that has been projected by various interest groups for years. 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 1-5.

Minnesota's personal income increased 806% from the 3 year average, 1927-29, to the 3 year average, 1968-70, compared to a slightly higher increase of 808% for the U.S. as a whole. The rate of growth from the mid-fifties to 1968-70 was greater for Minnesota than for the U.S. (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 the 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 512% between the 3 year period 1927-29 and the 3 year period 1968-70 while it increased 441% in the U.S. as a whole. Per capita income in Minnesota increased from \$598 in 1929 to \$3824 in 1970 while per capita income for the U.S. as a whole increased from \$703 to \$3921. Minnesota's per capita income gained both absolutely and relatively. Of the 7 Plains States and Wisconsin, Minnesota had the highest per capita income in 1970. 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, none 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 1,313% in Minnesota between 1929 and 1970 while the U.S. manufacturing payrolls increased 884%. Of the neighboring states, only Kansas had more rapid growth in manufacturing. 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 1970, 1950 to 1970, or 1960 to 1970. The rate of growth in such employment was also generally higher than in neighboring states. Since 1960, only North Dakota, 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 1 of them grew at a more rapid rate. See Table 4.

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 986% between 1929 and 1970 while the U.S. nonfarm income increased 894%. Minnesota's rate of increase was higher than that for any of the neighboring states. The same holds for the more recent period 1950-70. See Table 5.

Farm income is more volatile than non-farm 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 1968-70, Minnesota's realized net farm income grew faster (17.4%) than the national average (14.2%). Among the other Plains States, farm income grew faster than Minnesota in 3 states and more slowly in the remaining 3. See Table 5A.

The declining significance of the fact that agriculture is relatively important in Minnesota and the rapid 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, as well as for growth in non-farm income and per capita personal income.

Whether we measure growth by total personal income, per capita personal income, manufacturing payrolls, employment in manufacturing, non-farm 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, compared.

Area	1927-29	1953-55	1968-70	percent change	
	3 yr average	3 yr average	3 yr average	1927-29	1953-55
		million of dollars		to 1968-70	to 1968-70
United States	\$81,827	\$293,779	\$743,188	808.24%	152.97%
Wisconsin	1,891	6,386	15,285	708.30	139.35
Plains States	7,376	24,144	56,489	665.84	133.96
<u>Minnesota</u>	<u>1,485</u>	<u>5,255</u>	<u>13,447</u>	<u>805.52</u>	<u>155.88</u>
Iowa	1,354	4,344	9,826	625.70	126.19
Missouri	2,195	7,124	16,171	636.71	126.99
North Dakota	294	790	1,791	509.18	126.70
South Dakota	286	888	1,999	598.95	125.11
Nebraska	768	2,190	5,180	574.47	136.52
Kansas	995	3,552	8,077	711.75	127.39

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 1968-1970, Survey of Current Business, Dept. of Commerce, August 1971, p. 31.

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

Area	1927-29 3 year average	1953-55 3 year average	1968-70 3 year average	Per capita income 1970	Percent change	
					1927-29 to 1968-70	1953-55 to 1968-70
United States	\$682	\$1,822	\$3,687	\$3,921	440.61%	102.36%
Wisconsin	653	1,775	3,486	3,693	433.84	96.39
Plains States	560	1,667	3,487	3,701	522.67	109.17
<u>Minnesota</u>	<u>584</u>	<u>1,688</u>	<u>3,576</u>	<u>3,824</u>	<u>512.32</u>	<u>111.84</u>
Iowa	551	1,643	3,495	3,688	534.30	112.72
Missouri	610	1,748	3,490	3,704	472.13	99.65
North Dakota	436	1,292	2,890	2,995	562.84	123.68
South Dakota	418	1,356	2,994	3,165	616.26	120.79
Nebraska	562	1,629	3,510	3,751	524.55	115.46
Kansas	535	1,739	3,615	3,823	575.70	107.87

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.

Table 3

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

<u>Area</u>	<u>1929</u>	<u>1948</u>	<u>1970</u>	Percent change	
				<u>1948</u> <u>- 70</u>	<u>1929</u> <u>- 70</u>
United States	\$16,092	\$46,459	\$158,346	240%	884%
Wisconsin	487	1,384	4,228	205	768
Plains States	825	2,425	9,812	304	1,089
<u>Minnesota</u>	<u>191</u>	<u>582</u>	<u>2,699</u>	<u>363</u>	<u>1,313</u>
Iowa	131	437	1,807	313	1,279
Missouri	359	981	3,268	233	810
North Dakota	6	16	63	293	950
South Dakota	10	32	115	259	1,050
Nebraska	52	133	601	351	1,055
Kansas	77	244	1,259	415	1,535

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

2: Survey of Current Business, Department of Commerce, August, 1971 pp. 32-34 for 1970 data.

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

<u>Area</u>	Employment in thousands				Percent change		
	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1940</u> <u>-1970</u>	<u>1950</u> <u>-1970</u>	<u>1960</u> <u>-1970</u>
United States	10,985	15,241	16,796	19,393	76.54%	27.24%	15.46%
Wisconsin	279.7	434.5	460.4	500.8	79.04	15.25	8.77
Plain States	554.9	874.0	1,001.4	1,222.3	120.27	39.85	22.05
<u>Minnesota</u>	<u>117.6</u>	<u>200.7</u>	<u>229.7</u>	<u>319.7</u>	<u>171.85</u>	<u>59.29</u>	<u>39.18</u>
Iowa	95.6	154.4	176.6	214.3	124.16	38.79	21.34
Missouri	247.4	353.8	392.7	443.7	79.93	25.40	12.98
North Dakota	4.6	6.1	6.5	9.8	113.04	60.65	50.76
South Dakota	8.1	11.6	13.1	15.6	92.59	34.48	19.08
Nebraska	30.7	52.1	66.8	85.2	177.52	63.53	27.54
Kansas	50.9	95.3	116.0	134.0	163.26	40.60	15.51

Source: Handbook of Labor Statistics, 1971, U.S. Dept. of Labor, BLS,
Table 38, p. 80 for U.S. total - Table 48 pp. 97-98 for states
and regions.

Table 5

Non-farm Income in Minnesota, Neighboring States, and the U.S.
Selected Years. Millions of Dollars

<u>Area</u>	<u>1929</u>	<u>1950</u>	<u>1970</u>	Percent change	
				<u>1950</u> <u>- 70</u>	<u>1929</u> <u>- 70</u>
United States	\$78,402	\$209,463	\$779,904	272%	894%
Wisconsin	1,747	4,549	15,713	245	799
Plains States	5,990	15,919	56,226	253	838
<u>Minnesota</u>	<u>1,277</u>	<u>3,613</u>	<u>13,871</u>	<u>283</u>	<u>986</u>
Iowa	1,016	2,706	9,218	240	807
Missouri	2,041	5,089	16,690	227	717
North Dakota	156	486	1,674	244	973
South Dakota	167	521	1,742	234	943
Nebraska	533	1,390	4,987	258	801
Kansas	780	2,114	8,046	280	931

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, 1971 pp. 32-34 for 1970 data.

Table 5A

Realized Net Farm Income in Minnesota, Neighboring States, and the United States,
Selected Years. Millions of Dollars

Area	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1949-51</u> Average	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1968-70</u> Average	Percent Change 1949-51 to <u>1968-70</u>
United States	\$13,646	\$12,861	\$14,803	\$13,770	\$14,688	\$16,798	\$15,713	\$15,733	+14.2%
Wisconsin	417	409	537	454	534	568	568	557	+22.7%
<u>Plains States</u>									
Minnesota	553	514	555	541	581	686	638	635	+17.4%
Iowa	935	915	934	928	1008	1336	1196	1180	+27.2%
Missouri	516	488	590	531	515	607	558	560	+ 5.5%
North Dakota	244	201	220	222	226	288	212	242	+ 9.0%
South Dakota	270	201	237	236	334	375	363	357	+51.3%
Nebraska	432	375	448	418	499	634	594	576	+37.8%
Kansas	447	413	406	422	396	504	424	441	+ 4.5%

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

Table 6

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

<u>Area</u>	<u>1929</u>	<u>1948</u>	<u>1970</u>	Percent change	
				<u>1948-70</u>	<u>1929-70</u>
United States	121,770	146,093	203,185	39.0%	66.8%
Wisconsin	2,934	3,314	4,418	33.3	50.5
Plains States	13,260	13,604	16,324	19.9	23.1
<u>Minnesota</u>	<u>2,572</u>	<u>2,868</u>	<u>3,805</u>	<u>32.6</u>	<u>47.9</u>
Iowa	2,460	2,543	2,825	11.0	14.8
Missouri	3,622	3,844	4,677	21.6	29.1
North Dakota	674	580	618	6.5	- 9.8
South Dakota	690	612	666	8.8	- 3.5
Nebraska	1,375	1,265	1,484	17.3	7.9
Kansas	1,867	1,892	2,249	18.8	20.3