Minnesota Minimum-wage Report, 2002

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Executive summary

This report, part of an annual series, is a statistical description of Minnesota's population of minimum-wage workers. The report presents a detailed picture of Minnesota's minimum-wage workers in 2002, and an analysis of trends concerning minimum-wage workers from 1989 through 2001.

For purposes of this report, minimum-wage workers are defined as those who earn the minimum wage or less at their main job. Since September 1997, the minimum wage for most workers in Minnesota has been $5.15 an hour.[1]

Overview

- In 2002, there were an estimated 56,000 minimum-wage workers in Minnesota, or 2.3 percent of all wage-and-salary workers in the state.
- By comparison, 3.3 percent of U.S. wage-and-salary workers earned $5.15 an hour or less.
- Because of overall wage growth, the percentage of the state's wage-and-salary workers at or below $5.15 an hour fell from 4.5 percent in 1998 (the first full year of the current $5.15 minimum) to 2.3 percent in 2002.
- Hourly workers made up 60 percent of Minnesota's minimum-wage workers in 2002; nonhourly, or salaried, workers made up the remaining 40 percent.
- Among all Minnesota workers earning $5.15 an hour or less in 2002, 80 percent earned less than $5.15, with 48 percent earning less than $4.25. (Possible reasons include coverage exemptions, a lower minimum for some workers, illegal situations, and data errors.)

Estimates for 2002

Age and gender

- Among 16-19-year-olds in Minnesota, 8.4 percent earned $5.15 an hour or less, compared with 1.4 percent of 25-54-year-olds and 2.8 percent of those 55 and older.
- Twenty-seven percent of all minimum-wage workers were 16-19-year-olds even though this age group made up only 7 percent of the work force. Forty-five percent of all minimum-wage workers were 16-24.
- Women were more likely than men to be minimum-wage workers (3.0 percent of women vs. 1.7 percent of men). Women accounted for 63 percent of all minimum-wage workers.

Work status

- Six percent of part-time workers earned $5.15 an hour or less, compared with 1.2 percent of full-time workers.
- Part-time workers made up 61 percent of all minimum-wage workers, though only 24 percent of the work force.

Education

- Among workers with less than a high-school education, 7.5 percent were minimum-wage workers, compared with 2.5 percent for those with a high-school degree and 1.6 for those with at least some college.
- Those without a high-school degree made up 27 percent of all minimum-wage workers, even though they comprised only 8 percent of the work force.

[1] See Appendix A for exceptions.

Marital status

- Among unmarried workers, 3.7 percent earned $5.15 an hour or less, as opposed to 1.3 percent for those who were married.
- Unmarried workers accounted for two-thirds of all minimum-wage workers even though they made up only 42 percent of the work force.
- Unmarried women made up 40 percent of all minimum-wage workers even though they accounted for only 22 percent of the work force.

$6.15- vs. $5.15-an-hour threshold

- An estimated 117,000 workers, or 4.9 percent of all workers, earned $6.15 an hour or less. This compares with 56,000, or 2.3 percent of the total, earning no more than $5.15.
- While 16-19-year-olds made up 27 percent of those earning $5.15 or less, they accounted for 34 percent of those earning $6.15 or less.

Poverty status

- Minimum-wage workers accounted for 4.3 percent of workers living below the poverty line, as opposed to 2.2 percent of workers above the poverty line.
- Workers below the poverty line made up 15 percent of all minimum-wage workers, as opposed to 8 percent of the overall workforce.

Metropolitan residence

- In the Twin Cities metro area, minimum-wage workers made up 1.9 percent of the work force; for the rest of the state, minimum-wage workers were 3.0 percent of the total.
- Out-state Minnesota accounted for nearly half of all minimum-wage workers even though it had only 38 percent of the work force.

Industry

- Among major industries, eating and drinking places had the highest rate of minimum-wage workers, 13.5 percent. About 31 percent of all minimum-wage workers were employed in eating and drinking places. (Tips are not included in the calculations for this report.)
- Minimum-wage workers made up 2.8 percent of all workers in the service-producing sector, compared with 1.1 percent in the goods-producing sector.
- Eighty-nine percent of minimum-wage workers were in the service-producing sector.

Occupation

- Among major occupation groups, service occupations had the highest rate of minimum-wage workers at 8.5 percent.
- Almost half of all minimum-wage workers were in service occupations.
- Nearly 20 percent of private-household workers were minimum-wage workers.
- About a third of all minimum-wage workers were in food-service occupations. About 14 percent of workers in these occupations were minimum-wage workers.

Trends for 1989-2001

Minimum-wage levels

- From 1980 through 2001, the minimum wage for the Unites States and Minnesota was raised five times. The last four increases were in April 1990, March 1991, October 1996, and September 1997.
- Adjusted for inflation, the minimum wage fell during the 1980s. During the 1990s, the increases in the minimum wage kept roughly even with inflation.
- Because of increases in 1990 and 1991, the minimum wage rose from 27 percent of the median wage in January 1990 to 35 percent in 1992. Although the minimum was

increased again in 1996 and 1997, it stood at 36 percent of the median wage in 2001, about the same as in 1993.

- The full-time earnings of a minimum-wage worker in Minnesota are currently sufficient to support a single person above the poverty level, but not a family of two or more.

Numbers of minimum-wage workers

- The numbers of minimum-wage workers in Minnesota and the United States have tended to increase when the minimum is raised, and decline as general wage levels increase while the minimum remains fixed.

- From 1989 through 2001, minimum-wage workers accounted for an average of 4.1 percent of the work force in Minnesota, as compared to 5.2 percent for the United States.

- Through the combined effects of increases in the minimum wage and overall wages, minimum-wage workers accounted for about 3 percent of Minnesota's work force in 1989, 6 percent in late 1991, 3 percent in late 1995, 6 percent in late 1997, and about 2.5 percent in 2001.

- Wage trends, and thus trends in the number and percentage of minimum-wage workers, are affected both by inflation and productivity growth and--in the shorter run--by the economic cycle.

- Adjusting for inflation, Minnesota experienced little growth in wages in the early 1990s, but significant growth in the late 1990s. This likely pushed down the number of minimum-wage workers in the late 1990s.

Characteristics of minimum-wage workers

- From 1989 through 2001, workers 25 to 54 years old made up an average of 39 percent of minimum-wage workers in Minnesota and 45 percent in the United States. Workers in this age group are more likely to be supporting a family than younger workers and their earnings are less likely to be supplemented by retirement income than older workers.

- From 1989 through 2001, women made up an average of 63 percent of minimum-wage workers in Minnesota, compared with 49 percent of all workers.

- From 1989 through 2001, an average of 20 percent of minimum-wage workers lived in poverty, while only 7 percent of above-minimum-wage workers lived in poverty.

- The percentage of minimum-wage workers who are children living with their parents fell from 35 percent in 1989 to 25 percent in 2001. The percentages representing other family status — married workers, single workers living alone, and other workers — all rose.

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Introduction

The federal minimum-wage was enacted in 1938 as a means of raising the earnings of low-wage workers. From its initial level of $.25 an hour, it has been raised several times and now stands at $5.15. Initially, coverage was limited to employees engaged in interstate commerce or in the production of goods for interstate commerce. Coverage has since been expanded to include most of the labor force. Minnesota's minimum wage is currently equal to the federal minimum for large employers.

As policy-makers consider the minimum wage, a number of questions arise. One general question concerns the characteristics and circumstances of minimum-wage workers. Are they relatively young or old? What are their family status and family income? In what occupations and industries are they most likely to be found?

Another set of questions concerns changes in the minimum wage over time. How much has the minimum wage increased in recent years, and how does this compare to inflation? How have the number of minimum-wage workers and their characteristics changed? How do the Minnesota trends compare to those for the United States?

This report, part of an annual series, presents a statistical description of minimum-wage workers in Minnesota. Part 1 provides detailed statistics on the Minnesota's minimum-wage workers for 2002. Part 2 analyzes trends relating to minimum-wage levels and Minnesota's minimum-wage workers for 1989 through 2001. Appendix A contains Minnesota's minimum-wage law. Appendix B describes data and estimation procedures. Appendix C contains supplemental trend data on low-wage workers.

Data and estimation technique

The statistics in this report are estimates computed from the Current Population Survey (CPS). This survey, conducted monthly by the U.S. Bureau of Labor Statistics, provides data on the labor-market experience of U.S. households. The Minnesota survey data has too few sample cases to provide reliable estimates of the numbers of minimum-wage workers in different categories in the state. Therefore, the Minnesota estimates in Part 1 of the report were computed with a combination of Minnesota and U.S. data. This procedure is described in Appendix B.

Workers earning less than the minimum wage

Minimum-wage workers are defined in this report as people earning the minimum wage or less. Among Minnesota workers earning $5.15 an hour or less during 2000-2002, 80 percent earned less than $5.15, with 48 percent earning less than $4.25. Why does this occur?

First, some workers are exempt from the minimum wage.[2] Second, some nonexempt workers may legally be paid less than $5.15 an hour. Under Minnesota Law, for "small employers" — those with annual revenues of less than $500,000 — the minimum is $4.90 an hour. For workers under age 20, a minimum of $4.25 an hour applies during the first 90 days of employment. Special rules also apply to handicapped workers. Third, some covered workers may be paid less than the minimum wage illegally. This seems more likely with salaried workers than with hourly workers. Enforcement is clearly more challenging for salaried workers because of the difficulty of monitoring hours worked. Finally, data-reporting errors may occur. This also seems more likely for salaried workers, whose hourly earnings were calculated by dividing reported weekly pay by the reported number of hours worked per week.[3]

[2] See Appendix A.

[3] Hours worked may be reported with error, or actual hours worked in the survey week may be different from usual hours worked. Note that reporting error may cause reported or calculated wages to be *too high* for some workers. Thus, it is unknown whether reporting error causes an increase or decrease in the estimated number of minimum-wage workers.

Part 1

Estimates for 2002

This part of the report presents a statistical description of the population of minimum-wage workers in Minnesota in 2002. A set of figures describes the state's minimum-wage workers with regard to age, gender, work status (part-time vs. full-time), education, marital status, poverty status, metropolitan residence, industry, and occupation. Estimates are also presented on how the population of minimum-wage workers would change if the minimum were raised to $6.15 an hour. Before the detailed figures, it is helpful to consider some overall statistics on Minnesota's minimum-wage workers for 2002:

- An estimated 56,000 Minnesota workers, or 2.3 percent of the total, earned $5.15 an hour or less in 2002.
- By comparison, 3.3 percent of U.S. wage-and-salary workers earned $5.15 an hour or less.
- Because of overall wage growth, the percentage of the state's wage-and-salary workers at or below $5.15 an hour fell from 4.5 percent in 1998 (the first full year with the $5.15 minimum) to 2.3 percent in 2002.
- About 60 percent of Minnesota's minimum-wage workers were hourly workers; the remaining 40 percent were nonhourly, or salaried.

Figure 1
Minimum-wage workers by gender and age, Minnesota, 2002 [1]

Gender and age	Total workers (1,000s)	Number at or below $5.15/hour (1,000s)	Percentage at or below $5.15/hour	Group as percentage of all workers at or below $5.15/hour
Total, 16 years and over	**2,364**	**56**	**2.3%**	**100.0%**
16-19 years	176	15	8.4	26.7
20-24 years	252	10	4.1	18.7
25-54 years	1,659	23	1.4	40.9
55 years and over	277	8	2.8	13.7
Men, 16 years and over	**1,190**	**21**	**1.7**	**37.3**
16-19 years	85	6	7.0	10.7
20-24 years	131	4	3.2	7.6
25-54 years	847	8	.9	14.2
55 years and over	127	3	2.1	4.8
Women, 16 years and over	**1,174**	**35**	**3.0**	**62.7**
16-19 years	92	9	9.7	16.0
20-24 years	121	6	5.1	11.1
25-54 years	811	15	1.8	26.6
55 years and over	150	5	3.3	8.9

1. Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. Details in Appendix B.

Young workers and women are more likely than others to be minimum-wage workers. Older workers have a slightly greater-than-average likelihood of being minimum-wage workers.

- Among 16-19-year-olds, 8.4 percent earned $5.15 an hour or less, compared with 1.4 percent of 25-54-year-olds and 2.8 percent of those 55 and older.

- As a result, 16-19-year-olds comprised roughly 27 percent of all minimum-wage workers even though they made up only 7 percent of the work force. Combining the two youngest groups, 16-24-year-olds made up 45 percent of all minimum-wage workers.

- Although 25-54-year-olds were least likely to be minimum-wage workers, they made up 41 percent of all minimum-wage workers because they accounted for 70 percent of the work force.

- Women were more likely than men to be minimum-wage workers (3.0 vs. 1.7 percent), and therefore accounted for 63 percent of all minimum-wage workers.

Figure 2
Minimum-wage workers by work status, gender and age, Minnesota, 2002 [1]

Work status, gender and age	Total workers (1,000s)	Number at or below $5.15/hour (1,000s)	Percentage at or below $5.15/hour	Group as percentage of all workers at or below $5.15/hour
Total	**2,364**	**56**	**2.3%**	**100.0%**
Full-time [2]	**1,797**	**21**	**1.2**	**38.7**
Men	1,018	10	1.0	18.5
Women	779	11	1.4	20.2
16-19 years	33	2	5.7	3.3
20-24 years	167	4	2.6	7.8
25-54 years	1,411	12	.9	22.3
55 years and over	186	3	1.6	5.2
Part-time [2]	**567**	**34**	**6.0**	**61.3**
Men	173	10	6.1	18.9
Women	395	24	6.0	42.4
16-19 years	144	13	9.0	23.4
20-24 years	85	6	7.1	10.8
25-54 years	247	10	4.2	18.6
55 years and over	91	5	5.2	8.5

1. Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. Details in Appendix B.
2. Full-time workers are defined as those usually working 35 or more hours a week.

Part-time workers are much more likely than full-time workers to be minimum-wage workers.

- Six percent of part-time workers earned $5.15 an hour or less, compared with 1.2 percent of full-time workers.
- Part-time workers made up 61 percent of all minimum-wage workers, even though they accounted for only 24 percent of the work force.
- Among part-time workers, men and women were almost equally likely to be minimum-wage workers (6.1 vs. 6.0 percent). Among full-time workers, women were somewhat more likely to be minimum-wage workers (1.4 percent vs. 1.0 percent for men), but this difference was less than for the overall workforce (3.0 vs. 1.7 percent, from Figure 1). This means that the greater overall prevalence of minimum-wage workers among women than among men was largely because women were more likely than men to be part-time (34 percent vs. 15 percent).

Figure 3
Minimum-wage workers by education, gender and age, Minnesota, 2002 [1]

Education, gender and age	Total workers (1,000s)	Number at or below $5.15/hour (1,000s)	Percentage at or below $5.15/hour	Group as percentage of all workers at or below $5.15/hour
Total	**2,364**	**56**	**2.3%**	**100.0%**
Less than high school	**198**	**15**	**7.5**	**26.9**
Men	108	6	5.7	11.1
Women	90	9	9.7	15.7
16-19 years	105	11	10.1	19.0
20-24 years	18	1	4.9	1.6
25-54 years	53	2	3.7	3.5
55 years and over	22	2	6.9	2.7
High school only	**656**	**16**	**2.5**	**29.6**
Men	331	6	1.7	10.2
Women	324	11	3.3	19.4
16-19 years	43	3	6.2	4.8
20-24 years	76	3	4.1	5.6
25-54 years	434	8	1.8	14.2
55 years and over	102	3	2.7	5.0
At least some college	**1,511**	**24**	**1.6**	**43.5**
Men	751	9	1.2	16.1
Women	760	15	2.0	27.5
16-19 years	29	2	5.7	3.0
20-24 years	158	6	4.0	11.4
25-54 years	1,171	13	1.1	23.1
55 years and over	153	3	2.2	6.0

1. Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. Details in Appendix B.

Minimum-wage workers are most prevalent among the least-educated.

- Minimum-wage workers comprised 7.5 percent of workers with less than a high-school education, compared with 2.5 percent for those with a high-school degree and 1.6 for those with at least some college.
- Because a majority of workers have at least some college education, these people accounted for 44 percent of all minimum-wage workers.
- Those without a high-school degree made up 27 percent of all minimum-wage workers, even though they comprised only 8 percent of the work force.

Figure 4
Minimum-wage workers by marital status, gender and age, Minnesota, 2002 [1]

Marital status, gender and age	Total workers (1,000s)	Number at or below $5.15/hour (1,000s)	Percentage at or below $5.15/hour	Group as percentage of all workers at or below $5.15/hour
Total	**2,364**	**56**	**2.3%**	**100.0%**
Married, spouse present	**1,363**	**18**	**1.3**	**33.1**
Men	703	6	.8	10.7
Women	660	12	1.9	22.4
16-19 years	2	0	4.0	.2
20-24 years	38	1	2.5	1.7
25-54 years	1,128	13	1.1	22.9
55 years and over	195	5	2.4	8.3
Other marital status	**1,001**	**37**	**3.7**	**66.9**
Men	487	15	3.0	26.6
Women	514	22	4.4	40.3
16-19 years	174	15	8.5	26.6
20-24 years	214	9	4.4	16.9
25-54 years	531	10	1.9	17.9
55 years and over	82	3	3.7	5.4

1. Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. Details in Appendix B.

Unmarried workers are more likely to earn $5.15 an hour or less than are married workers.

- Minimum-wage workers comprised 3.7 percent of unmarried workers, as opposed to 1.3 percent for those who were married.
- Unmarried workers accounted for two-thirds of all minimum-wage workers even though they made up only 42 percent of the work force.
- Unmarried women made up 40 percent of all minimum-wage workers even though they accounted for only 22 percent of the work force.

Figure 5
Low-wage workers according to $5.15/hour and $6.15/hour thresholds, Minnesota, 2002 [1]

Marital status, gender and age	Total workers (1,000s)	Number of workers: at or below $5.15/hr. (1,000s)	between $5.15/hr. and $6.15/hr. (1,000s)	at or below $6.15/hr. (1,000s)	Percentage of group: at or below $5.15/hr.	between $5.15/hr. and $6.15/hr.	at or below $6.15/hr.	Group as percentage of: All workers at or below $5.15/hr.	All workers at or below $6.15/hr.
Total, 16 years and over	**2,364**	**56**	**61**	**117**	**2.3%**	**2.6%**	**4.9%**	**100.0%**	**100.0%**
16-19 years	176	15	25	40	8.4	14.3	22.7	26.7	34.3
20-24 years	252	10	12	22	4.1	4.6	8.7	18.7	18.8
25-54 years	1,659	23	19	42	1.4	1.2	2.5	40.9	35.8
55 years and over	277	8	5	13	2.8	1.9	4.7	13.7	11.1
Men	**1,190**	**21**	**24**	**44**	**1.7**	**2.0**	**3.7**	**37.3**	**38.0**
16-19 years	85	6	11	17	7.0	13.0	20.0	10.7	14.5
20-24 years	131	4	5	9	3.2	3.8	7.0	7.6	7.9
25-54 years	847	8	6	14	.9	.7	1.7	14.2	12.0
55 years and over	127	3	2	4	2.1	1.2	3.4	4.8	3.7
Women	**1,174**	**35**	**38**	**72**	**3.0**	**3.2**	**6.2**	**62.7**	**62.0**
16-19 years	92	9	14	23	9.7	15.4	25.1	16.0	19.8
20-24 years	121	6	7	13	5.1	5.5	10.5	11.1	10.9
25-54 years	811	15	13	28	1.8	1.6	3.4	26.6	23.8
55 years and over	150	5	4	9	3.3	2.5	5.8	8.9	7.4
Married, spouse present	**1,363**	**18**	**15**	**33**	**1.3**	**1.1**	**2.4**	**33.1**	**28.4**
Men	703	6	4	10	.8	.6	1.5	10.7	8.8
Women	660	12	10	23	1.9	1.6	3.5	22.4	19.6
16-19 years	2	0	0	0	4.0	4.8	8.8	.2	.2
20-24 years	38	1	1	2	2.5	3.2	5.8	1.7	1.9
25-54 years	1,128	13	10	23	1.1	.9	2.0	22.9	19.7
55 years and over	195	5	3	8	2.4	1.6	4.0	8.3	6.6
Other marital status	**1,001**	**37**	**46**	**84**	**3.7**	**4.6**	**8.3**	**66.9**	**71.6**
Men	487	15	19	34	3.0	4.0	7.0	26.6	29.2
Women	514	22	27	50	4.4	5.3	9.6	40.3	42.4
16-19 years	174	15	25	40	8.5	14.4	22.8	26.6	34.1
20-24 years	214	9	10	20	4.4	4.8	9.2	16.9	16.9
25-54 years	531	10	9	19	1.9	1.7	3.5	17.9	16.1
55 years and over	82	3	2	5	3.7	2.7	6.4	5.4	4.5

1. Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Lab Statistics. Details in Appendix B.

The number of workers earning $6.15 an hour or less is more than double the number earning $5.15 or less. Earnings rates of $6.15 or less are more highly concentrated among young and nonmarried workers than are earnings rates of $5.15 or less.

- An estimated 117,000 workers, or 4.9 percent of the total, earned $6.15 an hour or less. This compares with 56,000, or 2.3 percent of the total, earning no more than $5.15.
- While 16- to19-year-olds made up 27 percent of those earning $5.15 or less, they accounted for 34 percent of those earning $6.15 or less.
- Unmarried workers comprised 67 percent of those at or below $5.15, but 72 percent of those earning no more than $6.15.

Figure 6
Minimum-wage workers by poverty status, gender and age, Minnesota, 2002 [1]

Poverty status, gender and age	Total workers (1,000s)	Number at or below $5.15/hour (1,000s)	Percentage at or below $5.15/hour	Group as percentage of all workers at or below $5.15/hour
Total	**2,364**	**56**	**2.3%**	**100.0%**
Above poverty line [2]	**2,165**	**47**	**2.2**	**84.7**
Men	1,092	18	1.6	31.7
Women	1,073	29	2.7	53.0
16-19 years	158	13	8.4	24.0
20-24 years	230	8	3.5	14.3
25-54 years	1,522	19	1.3	35.1
55 years and over	255	6	2.5	11.3
At or below poverty line [2]	**199**	**9**	**4.3**	**15.3**
Men	98	3	3.2	5.6
Women	101	5	5.3	9.7
16-19 years	18	2	8.3	2.7
20-24 years	22	2	10.9	4.4
25-54 years	136	3	2.3	5.8
55 years and over	22	1	6.1	2.5

1. Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. Details in Appendix B.
2. The poverty line depends on household size and is applied to total household income. The poverty status of each household member is the same as the poverty status of the household.

Minimum-wage workers are more prevalent among those in poverty than among other workers.

- Minimum-wage workers accounted for 4.3 percent of workers living below the poverty line, as opposed to 2.2 percent of workers above the poverty line.
- Workers below the poverty line made up 15 percent of all minimum-wage workers, compared with 8 percent of the overall work force.

Figure 7
Minimum-wage workers by metropolitan residence, gender and age, Minnesota, 2002 [1]

Metropolitan residence, gender and age	Total workers (1,000s)	Number at or below $5.15/hour (1,000s)	Percentage at or below $5.15/hour	Group as percentage of all workers at or below $5.15/hour
Total	**2,364**	**56**	**2.3%**	**100.0%**
Twin Cities MSA [2]	**1,468**	**28**	**1.9**	**51.3**
Men	743	11	1.5	19.4
Women	725	18	2.4	31.9
16-19 years	92	7	7.1	11.8
20-24 years	145	5	3.5	9.1
25-54 years	1,067	13	1.3	24.0
55 years and over	164	4	2.2	6.4
Balance of state	**896**	**27**	**3.0**	**48.7**
Men	447	10	2.2	17.9
Women	449	17	3.8	30.8
16-19 years	84	8	9.8	14.9
20-24 years	107	5	5.0	9.6
25-54 years	592	9	1.6	16.8
55 years and over	113	4	3.6	7.4

1. Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. Details in Appendix B.
2. The Twin Cities Metropolitan Statistical Area (MSA) is composed of 13 counties, including 11 in Minnesota: Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington and Wright. The Wisconsin portion of the MSA is excluded.

Minimum-wage workers are more prevalent in out-state Minnesota than in the Twin Cities metropolitan area.

- In the Twin Cities metro area, minimum-wage workers constituted 1.9 percent of the work force; for the rest of the state, minimum-wage workers were 3.0 percent of the total.

- Out-state Minnesota accounted for nearly half of all minimum-wage workers even though it had only 38 percent of the work force.

Figure 8
Minimum-wage workers by industry, Minnesota, 2002 [1]

Industry [2]	Total workers (1,000s)	Number at or below $5.15/hour (1,000s)	Percentage at or below $5.15/hour	Group as percentage of all workers at or below $5.15/hour
Total	**2,364**	**56**	**2.3%**	**100.0%**
Goods-producing industries	**577**	**6**	**1.1**	**11.0**
Agriculture, foresty and fishing	34	2	5.1	3.2
Mining	9	0	.9	.1
Construction	131	1	1.0	2.3
Manufacturing	403	3	.7	5.3
Durable goods	157	1	.9	2.5
Nondurable goods	246	2	.6	2.8
Service-producing industries	**1,787**	**49**	**2.8**	**89.0**
Transportation, communication and utilities	157	2	1.0	2.9
Wholesale trade	103	1	.9	1.7
Retail trade	400	23	5.7	40.9
Eating and drinking places	125	17	13.5	30.5
Other retail trade	274	6	2.1	10.4
Finance, insurance and real estate	176	2	1.3	4.1
Services	867	21	2.4	38.1
Health services	246	2	1.0	4.5
Education services	208	4	1.8	6.8
Social services	75	4	4.9	6.6
Other services	338	11	3.3	20.3
Public administration [3]	84	1	.9	1.3

1. Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. Details in Appendix B.
2. Except for the public administration division (see note 3), industries include the private and public sectors.
3. The public administration division is limited to those government employees not classifiable under other industries, such as construction or services.

Minimum-wage workers are most prevalent in eating and drinking places.

- Among the industries shown, eating and drinking places had the highest rate of minimum-wage workers, 13.5 percent. About 31 percent of all minimum-wage workers were employed in eating and drinking places. (Tips are not included in these calculations.)

- Eighty-nine percent of minimum-wage workers were in the service-producing sector, with 11 percent in the goods-producing sector.

- This was partly because most of the work force (76 percent) was in the service sector, but also because the rate of minimum-wage workers was greater in that sector (2.8 percent) than in the goods-producing sector (1.1 percent).

Figure 9
Minimum-wage workers by occupation, Minnesota, 2002 [1]

Occupation	Total workers (1,000s)	Number at or below $5.15/hour (1,000s)	Percentage at or below $5.15/hour	Group as percentage of all workers at or below $5.15/hour
Total	**2,364**	**56**	**2.3%**	**100.0%**
Managerial and professional	**749**	**8**	**1.1**	**14.9**
Technical, sales and administrative support	**731**	**11**	**1.6**	**20.5**
Technicians	106	1	.6	1.2
Sales	265	6	2.3	10.9
Administrative support, incl. clerical	361	5	1.3	8.5
Service	**316**	**27**	**8.5**	**48.4**
Private household	10	2	19.6	3.6
Protective service	32	0	1.4	.8
Food service	129	19	14.4	33.4
Health service	57	1	2.1	2.1
Cleaning and building service [2]	48	2	3.4	3.0
Personal service	39	3	7.9	5.6
Farming, forestry and fishing	**30**	**2**	**5.4**	**2.9**
Precision production, craft and repair	**244**	**2**	**.8**	**3.5**
Mechanics and repairers	83	1	.8	1.3
Construction trades	88	1	.9	1.4
Precision production and mining	72	1	.7	.9
Operators, fabricators and laborers	**294**	**5**	**1.8**	**9.8**
Machine operators and assemblers	128	2	1.4	3.2
Transportation equipment operators	86	1	1.7	2.7
Handlers, helpers and laborers	80	2	2.7	3.9

1. Estimated by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau Labor Statistics. Details in Appendix B.
2. Other than private-household workers.

Minimum-wage workers are most prevalent in service occupations.

- Among the major occupation groups, service occupations had the highest rate of minimum-wage workers, 8.5 percent.
- Almost half of all minimum-wage workers were in service occupations.
- Among the occupation groups shown, private-household workers had the highest rate of minimum-wage workers, nearly 20 percent.
- About a third of all minimum-wage workers were in food-service occupations. About 14 percent of workers in these occupations were minimum-wage workers.

Part 2

Trends for 1989-2001

This part of the report describes changes in the population of minimum-wage workers in Minnesota from 1989 through 2001. It examines hourly and weekly wage levels and workers' characteristics. Characteristics of minimum-wage workers are compared to those of other workers, and comparisons of workers from Minnesota and the rest of the United States are made. The first two sections discuss the level of the minimum wage and the overall number of minimum-wage workers. The third section discusses the well-being of minimum-wage workers — their work hours, earnings, family status and poverty rate. The fourth section provides information on demographics — age, gender, race and education. The final section deals with industry, occupation and location. Appendix C provides information on changes in wages for broader classes of low-wage workers.

Minimum-wage levels

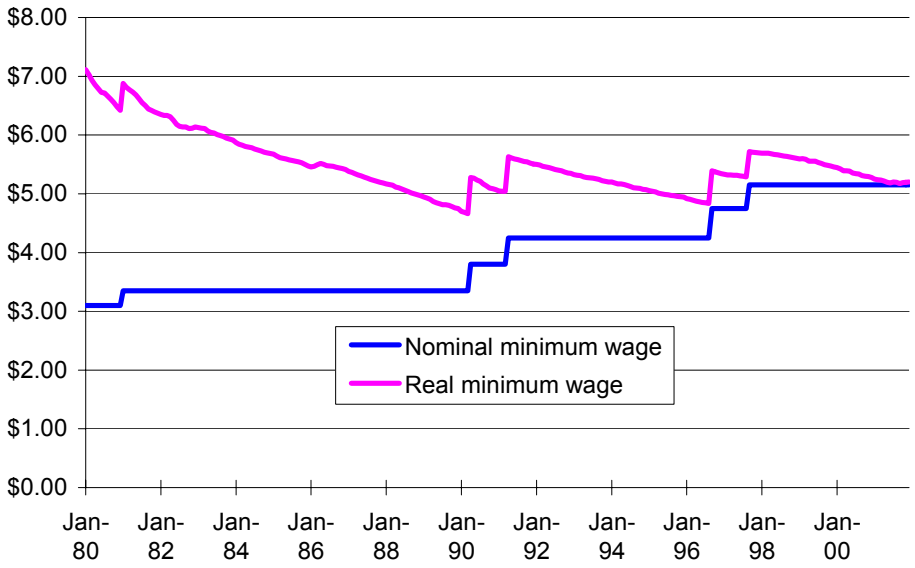
The minimum wage in the United States was increased five times in the 1970s. From Jan. 1, 1980, through Sept. 1, 1997, it was raised another six times, as shown in Figure 10. Although there are some exceptions, these minimum-wage levels applied to most workers in Minnesota.[4]

Figure 10: Federal minimum-wage levels

Start date	End date	Level
Jan. 1, 1980	Dec. 31, 1980	$3.10
Jan. 1, 1981	March 31, 1990	$3.35
April 1, 1990	March 30, 1991	$3.80
March 31, 1991	Sept. 30, 1996	$4.25
Oct. 1, 1996	Aug. 31, 1997	$4.75
Sept. 1, 1997	*Currently in effect*	$5.15

[4] One exception is that a worker under age 20 can be paid $4.25 an hour for his or her first 90 consecutive days of employment.

Figure 11
Nominal and real values of United States minimum wage, 1980-2001 [1]



1. See footnote 7 in text.

One way to put the minimum-wage level in perspective is to examine its buying power. Figure 11 shows the "real" and "nominal" minimum wage from 1980 to 2001.[5] In real terms, the minimum wage reached its lowest value of the 1990s in May 1990, when it was $4.66. Its highest value in the 1990s was $5.72 in September 1997. Overall, the real value of the minimum wage was fairly constant, however, jumping upwards when the level was raised and then slowly declining as inflation eroded its buying power.

A second way to put the minimum-wage level in perspective is to compare it to the wages of other workers. The median wage is one measure of other workers' wages. It is the middle wage in the wage distribution (i.e., one-half of workers earn more than the median wage and one-half of workers earn less than the median wage). Figure 12 shows the minimum wage as a percentage of the median wage. The percentage rose sharply at the four times when the minimum wage was increased. Ignoring periods when the minimum wage was increased, before 1995 the percentage stayed fairly constant. This means wage growth was low before 1995. From 1995 to 1999, however, the minimum wage fell as a percentage of the median wage (except in the two periods when the minimum wage was increased). This is because wages grew substantially during this period.

A third way to put the minimum-wage level in perspective is to compare its earning power to the cost of basic needs. The poverty threshold is defined by the U.S. Census Bureau to provide a measure of the amount of income required to meet basic needs. Figure 13 compares poverty thresholds in the 1990s to the annual earnings of a full-time minimum-wage worker. The figure ignores many complications in the relationship between earnings and needs, and it does not account for differences in individual circumstances or support from government programs. For most of the 1990s, the minimum wage was adequate to support a single person above the poverty line, but was not adequate to support two people above the poverty line.

[5] The real minimum wage is the inflation-adjusted minimum wage in 2002 dollars. The nominal minimum wage is the unadjusted value.

Figure 12
U.S. minimum wage as a percentage of United States median hourly wage, 1989-2001 [1]

1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B.

Figure 13
Real average annual earnings of a full-time United States minimum-wage worker compared to poverty line, 1990-2000

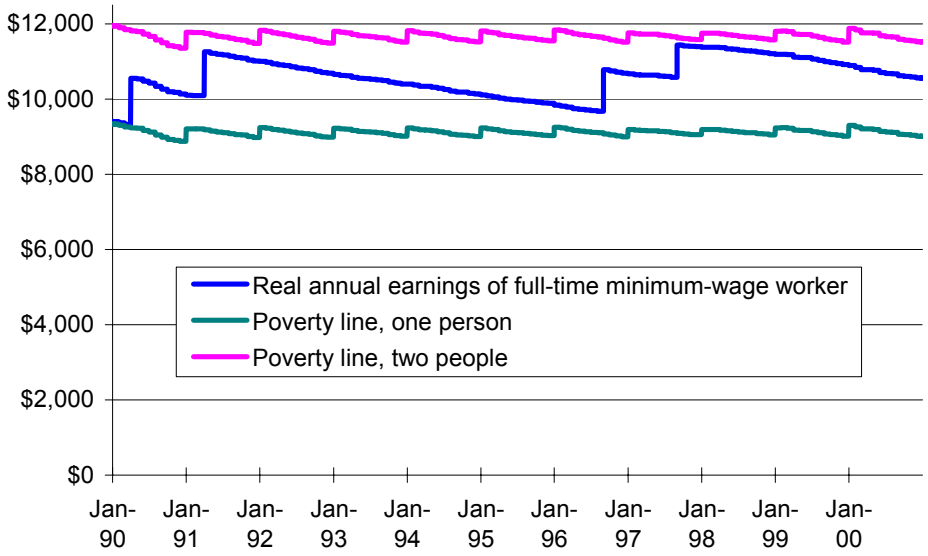
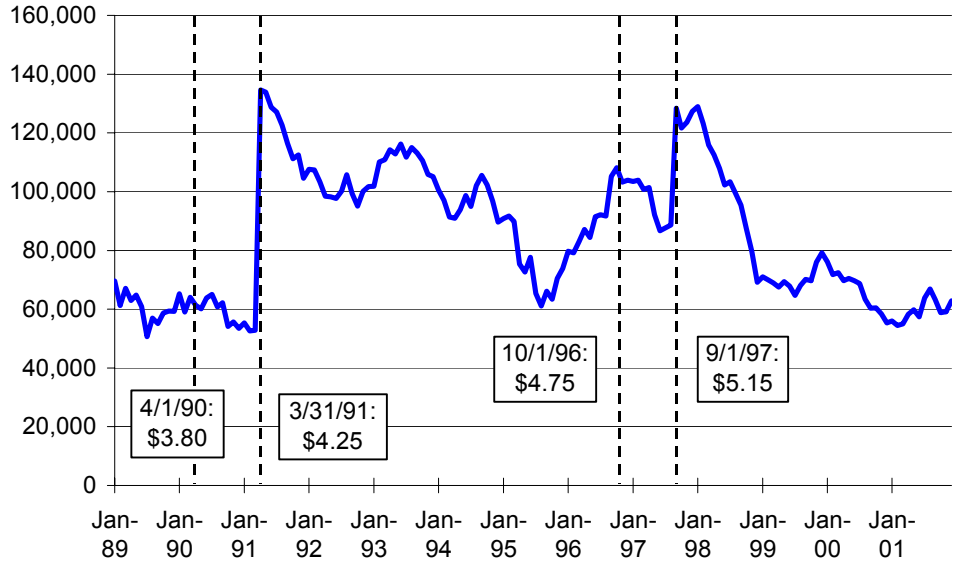


Figure 14
Number of minimum-wage workers in Minnesota, 1989-2001 [1]



1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B.

Number of minimum-wage workers

From 1989 through 2001 there were an average of 86,000 minimum-wage workers in Minnesota. Figure 14 shows the number of minimum-wage workers in Minnesota during this period.[6] The trends shown in Figure 14 seem to be explained by two main factors: changes in the real level of the minimum wage and the strength of the economy.[7] Another factor that may also contribute to fluctuations is the share of workers who are young.

The number of minimum-wage workers was almost constant from 1989 to April 1991. The increase in the minimum wage in April 1990 did not seem to have much effect. This is probably because the level of the minimum wage was so low that, even after the increase, few workers were affected by it. The increase in April 1991 corresponded with a large increase in the number of minimum-wage workers. The number of minimum-wage workers went from 57,000 in the previous 12 months to 118,000 in the next 12 months. The proximity of the previous minimum wage increase means the real level of the minimum wage was 21 percent higher than it was 13 months before. The increase seems to have affected a large number of workers. In addition, relatively slow growth in overall wage levels means that general wage growth would not do much to mitigate the effects of the increases in the minimum wage.

From April 1991 through September 1996, the number of minimum-wage workers fluctuated. It fell rapidly in 1991, rose and then fell again in 1994, and then dipped and rose again in 1995. The decline in 1991 probably occurred as the labor market adjusted to the new minimum-wage level. The other two fluctuations may have been driven by sampling problems related to the share of young workers in Minnesota. According to the CPS data, the share of workers age 21 or younger rose from a base of about 11 percent to slightly more than 12 percent and then fell to less than 10 percent in 1993 and early 1994. It is not clear whether these fluctuations were caused by actual changes in work force demographics or whether they were merely due to problems

[6] As with most figures in this report, Figure 14 shows an 11-month moving average, with breaks when the minimum wage was raised.

[7] The percent growth in nominal wages is equal to the percent growth in prices (inflation) and the percent growth in real wages (productivity).

with the CPS sample. If the changes in demographics were real, then they seem to explain the "hump" in the number of minimum-wage workers during 1993, as well as a subsequent dip in the number of minimum-wage workers.

Effects of increases in the minimum wage

When analyzing the effects of changes in the level of the minimum wage it is sometimes helpful to consider two groups of workers separately. The first group is the workers who earn the minimum wage before the minimum-wage level is increased. The second is the group of workers who, before the increase, earn more than the old minimum wage but less than the new minimum wage. Both groups of workers will see increases in their wage levels if they remain employed.[8] The presence of these two groups can make it hard to interpret the effects of minimum-wage increases. For example, an increase in the minimum wage will almost surely result in an increase in the number of minimum-wage workers. This is because workers in the second group are likely to be reclassified as minimum-wage workers right after a wage increase. On the other hand, an increase in the minimum wage is also likely to lower employment prospects at least a little for low-wage workers.

The effects of the increases in the minimum wage in 1996 and 1997 appear similar to the effects of the changes in 1990 and 1991. The 1996 increase had a small effect on the number of minimum-wage workers and the 1997 increase had a fairly large effect. There was a gradual increase in the number of minimum-wage workers through most of 1996, but this probably occurred because of either actual or statistical fluctuations in the share of young workers.[9] The 1997 increase in the minimum wage seems to have had a more important effect on the number of minimum-wage workers. Their numbers increased from about 100,000 to more than 120,000. During 1998, the number of minimum-wage workers fell sharply. The labor market seems to have been adjusting to the new minimum-wage level — perhaps employers like to reward certain workers by raising their wages above the minimum wage. The strong economy, which brought strong increases in real wages, probably explains why the number of minimum-wage workers fell faster than in 1991. From 1999 through 2001, the number of minimum-wage workers was fairly stable, declining slightly from approximately 70,000 to 60,000.

Numbers of minimum-wage workers in Minnesota and the United States

The share of minimum-wage workers in Minnesota has consistently been lower than the share in the United States as a whole. Figure 15 shows the trend. On average for the 1989 through 2001 period, the share of minimum-wage workers in Minnesota was about 20 percent lower than it was in the United States. From 1989 to 2001, the average share of workers who earned the minimum wage was 4.1 percent in Minnesota and 5.2 percent in the United States. The gap was somewhat larger before the March 1991 increase in the minimum wage than afterwards — Minnesota's share was about 30 percent lower before March 1991. This difference seems partially due to the fact that average wages in Minnesota are higher than wages in the United States. During this period, average real wages in Minnesota were approximately three percent higher than they were in the United States as a whole. The difference also seems due to the fact that wages are not quite as widely dispersed in Minnesota as they are in the United States as a whole (i.e., wages vary slightly more in the United States as a whole than they do in Minnesota).[10]

Trends in the shares of minimum-wage workers in the Minnesota and United States are similar. Jumps in shares of similar size occur in 1991,

[8] Workers in both groups are likely to remain employed, but there is evidence that increases in the minimum wage reduce employment somewhat for workers in these groups.

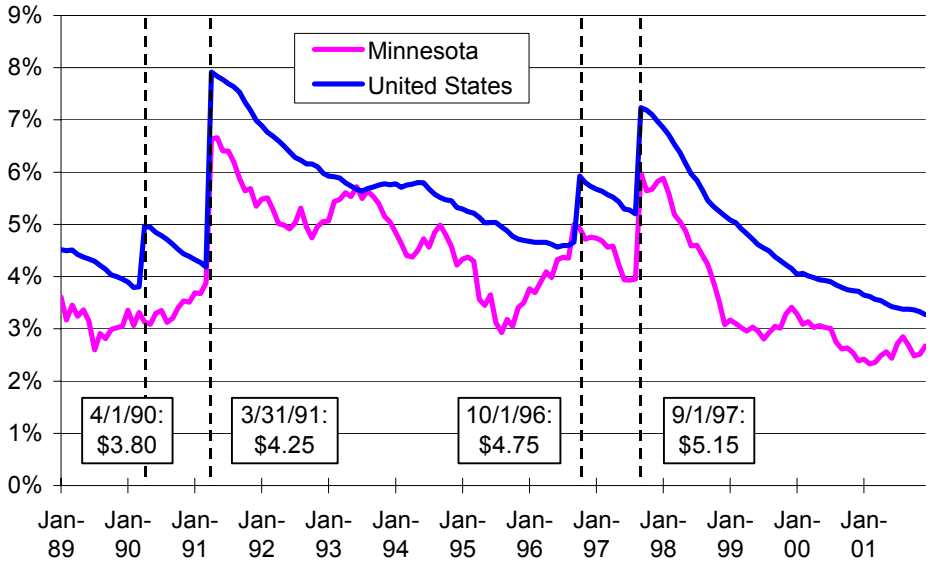
[9] The CPS data shows that the share of young workers increased in 1996. This increase could explain the increase in the number of minimum-wage workers, but the increase in the number of young workers could also be due simply to statistical fluctuations.

[10] Wage dispersion can be measured in a number of ways, which generally show that Minnesota has slightly less wage dispersion than the United States. For example, the average 25th percentile wage in Minnesota for 1989 to 2001 is 8 percent higher than it is for the United States. The average 75th percentile wage is only 3 percent higher, however.

1996 and 1997, when the minimum-wage level is increased. In 1990, the share in Minnesota did not increase, but Minnesota's share increased more in 1991 than did the United States share.

Minnesota's increase in 1997 also looked small, but this could be because of changes in the share of young workers in the labor force. Overall, Minnesota's share is much more variable than the United States share. This is mainly because there is less data available in Minnesota, so there is more random variation. It may also be partially because there is more variability in the share of young workers in Minnesota than there is in the United States.[11]

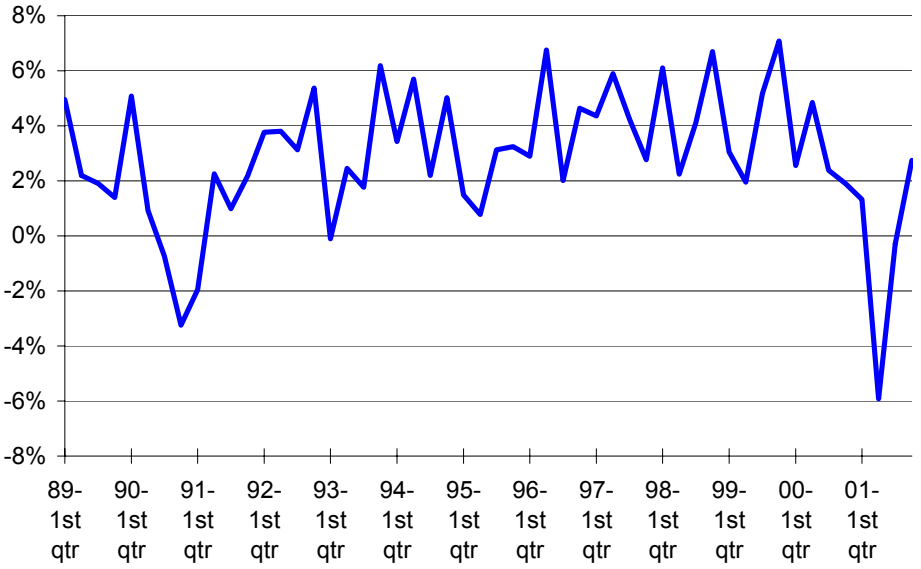
Figure 15
Minimum-wage workers as percentage of all wage-and-salary workers, Minnesota and the United States, 1989-2001 [1]



1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B.

[11] The greater variability in Minnesota of the share of young workers may also be due to sampling variation.

Figure 16
Growth rate of United States Gross Domestic Product, by quarter, 1989-2001 [1]



1. Data from the U.S. Bureau of Labor Statistics. Growth is expressed as an annual rate.

Effects of economic trends

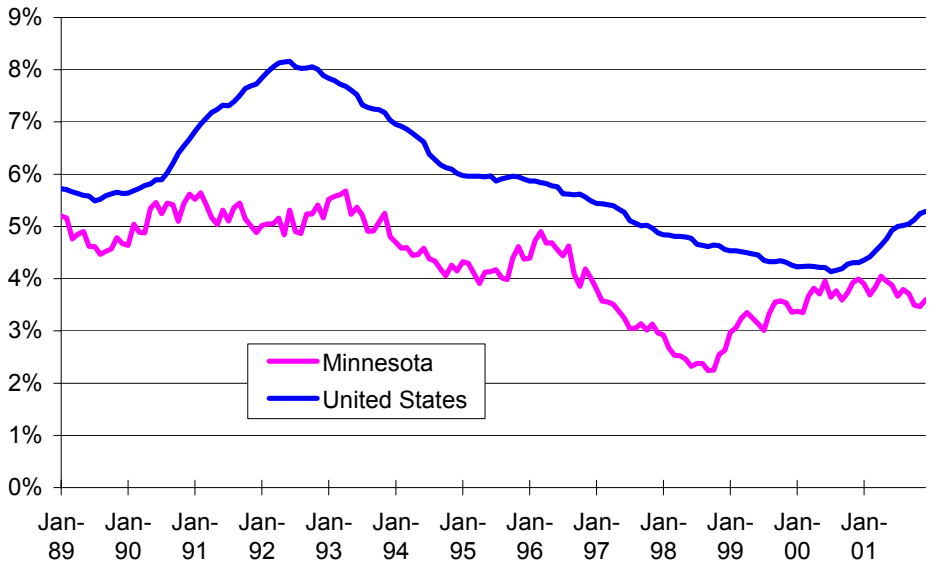
Economic trends have important effects on wage levels. In the long run, productivity is a primary determinant of wages. In the short run, business cycles — periods of slower- or faster-than-average growth — also affect wages.

The broadest measure of economic activity in the U.S. is Gross Domestic Product (GDP). Figure 16 shows that U.S. GDP growth in the 1990s was generally steady. A mild recession occurred in 1990, but growth fluctuated around slightly less than 4 percent for most of the rest of the decade. Growth was somewhat stronger in the late 1990s. Falling unemployment rates coincided with this growth. In the United States, the unemployment rate fell from 8 percent in 1992 to slightly more than 4 percent in 2000.

Minnesota's economy appears generally to have been less affected by economic fluctuations than the United States in the early 1990s, but more affected in the late 1990s. Minnesota's economy did not seem as deeply affected by the 1990 U.S. recession as the U.S. economy was. Figure 17 shows the trend for Minnesota and U.S. unemployment rates. Minnesota's unemployment rate never got much above 5 percent in the early 1990s, and didn't decline much until 1996.

The growth of the late 1990s seemed even stronger in Minnesota than it was in the United States. Minnesota's unemployment rate fell from almost 5 percent at the beginning of 1996, to about 2.5 percent in early 1999. Another sign that Minnesota's economy outperformed the U.S. economy in the late 1990s was that real wages rose much more quickly than they did in the United States. Gross state output (GSP) is closely tied to wages, and the real level of gross state output in Minnesota rose more quickly in the last half of the 1990s than the real U.S. level did. From 1989 to 1993, the average growth rate for Minnesota's real GSP was 1.8 percent. The U.S. real GDP grew only slightly faster at 2.1 percent. From 1996 to 2000, Minnesota's real GSP grew significantly faster than real U.S. GDP. The growth rate in Minnesota was 5.5 percent and in the United States it was 4.0 percent.

Figure 17
Unemployment rate of civilian labor force, Minnesota and the United States, 1989-2001 [1]



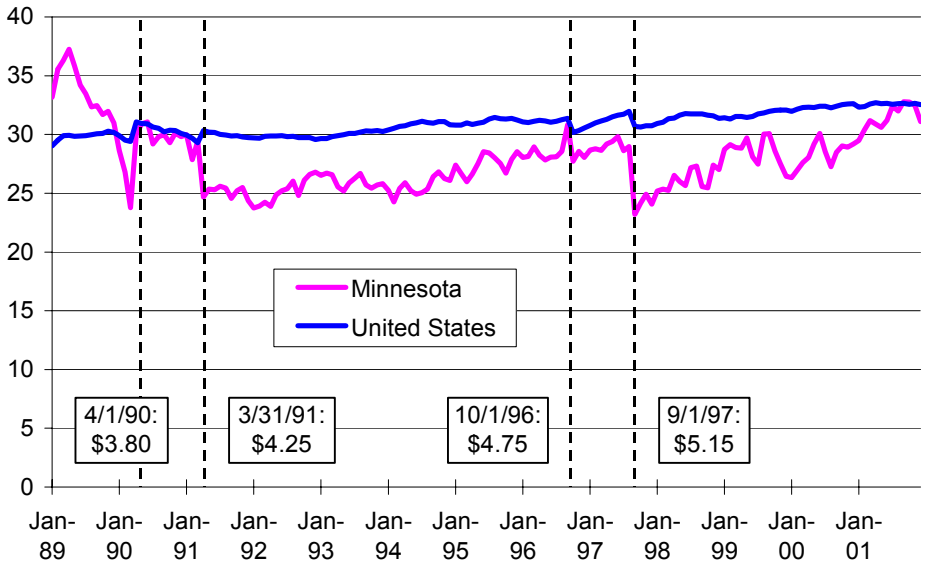
1. Data from the U.S. Bureau of Labor Statistics.

Indicators of well-being — work hours, earnings, poverty rate and family status

Hourly wages are only one indicator of a worker's well-being. The number of hours worked can be an important indicator of well-being. Some workers may have problems because they cannot work as many hours as they would like or if part-time jobs provide limited nonwage benefits (e.g., health insurance benefits). Low hourly wages may force other workers to work more hours than they would prefer. Other important indicators of well-being are total earnings and household income. In addition, the poverty rate provides one measure of the adequacy of a household's income.

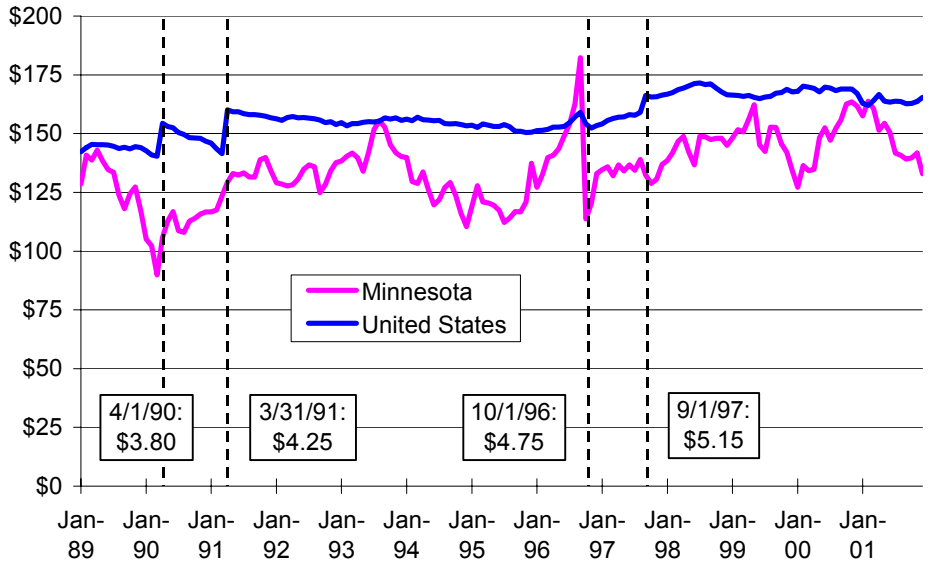
Figure 18 shows the average hours worked by minimum-wage workers in Minnesota and the United States and Figure 19 shows the average real weekly earnings of minimum-wage workers. The United States data suggests that during the 1990s, increases in the minimum wage had mixed effects on the number of hours worked, but generally led to increases in average weekly earnings for employed workers. Average hours increased in 1990 and 1991, but declined in 1996 and 1997. Real weekly earnings increased in 1990, 1991 and 1997, but the effect of the 1996 increase was unclear. The overall effect of an increase in the minimum wage on earnings, however, must take into account that the increase may cause a reduction in employment. This effect is not considered here.

Figure 18
Average weekly work hours for minimum-wage workers, Minnesota and the United States, 1989-2001 [1]



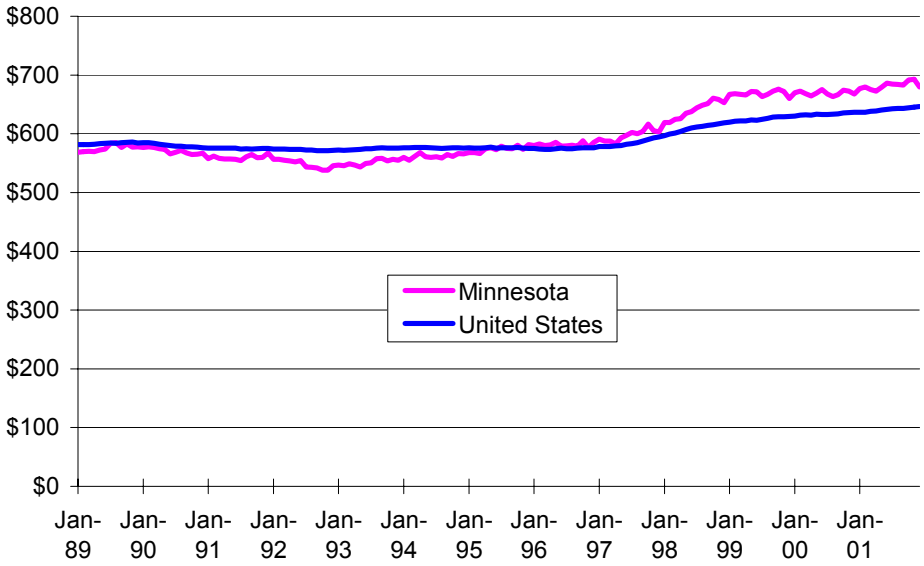
1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B.

Figure 19
Real average weekly earnings for minimum-wage workers, Minnesota and the United States, 1989-2001 [1]



1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B. Earnings are expressed in 2002 dollars.

Figure 20
Real average weekly earnings all wage-and-salary workers, Minnesota and the United States, 1989-2001 [1]



1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B. Earnings are expressed in 2002 dollars.

Real weekly earnings for all workers in Minnesota rose much faster than they did for all workers in the United States. Figure 20 shows real weekly earnings. The economic growth of the late 1990s seems to have translated into strong wage growth in Minnesota. Part of the explanation for this may be that the unemployment rate in Minnesota was so low during this period, that there was a great deal of upward pressure on wages.

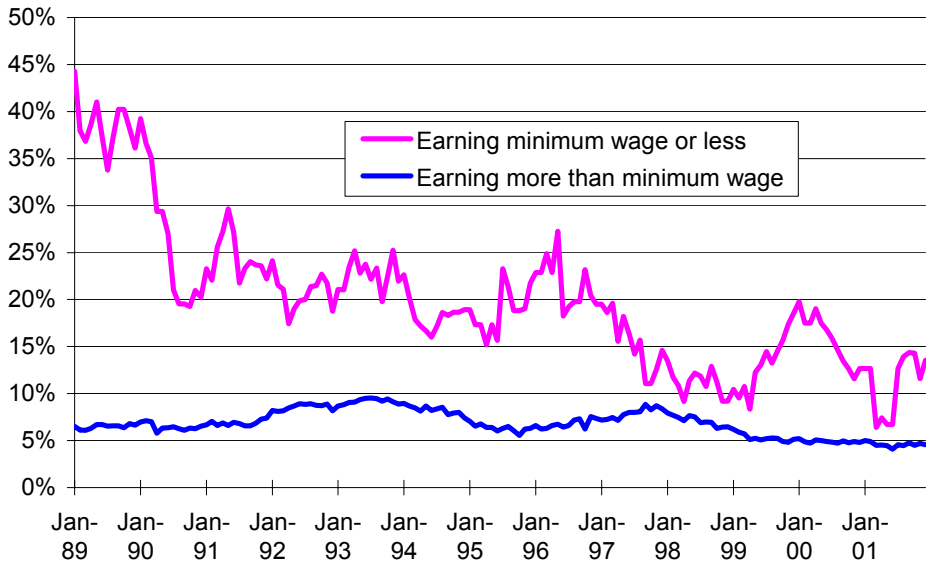
Interestingly, while the average worker earns higher weekly wages in Minnesota than in the United States, the average minimum wage worker in Minnesota earns lower weekly wages than the average minimum-wage worker in the United States.

These lower earnings are primarily caused by fewer hours worked.[12] Somewhat surprisingly, the lower average weekly wages in Minnesota probably represents good news. Given the extremely low unemployment rates in Minnesota during the 1990s, most low-wage workers probably could have worked more hours if they wanted to.[13] The fact that they chose not to work as many hours could mean that they could afford to work less. Perhaps they were students or were in families in which other family members earned more.

[12] Average hourly wages for minimum-wage workers may also vary because some workers earn less than the minimum wage, but they do not vary much because many minimum-wage workers earn exactly the minimum wage.

[13] These additional hours might not necessarily be at their primary job, they could be at other jobs.

Figure 21
Poverty rate of minimum-wage and nonminimum-wage workers in Minnesota, 1989-2001 [1]

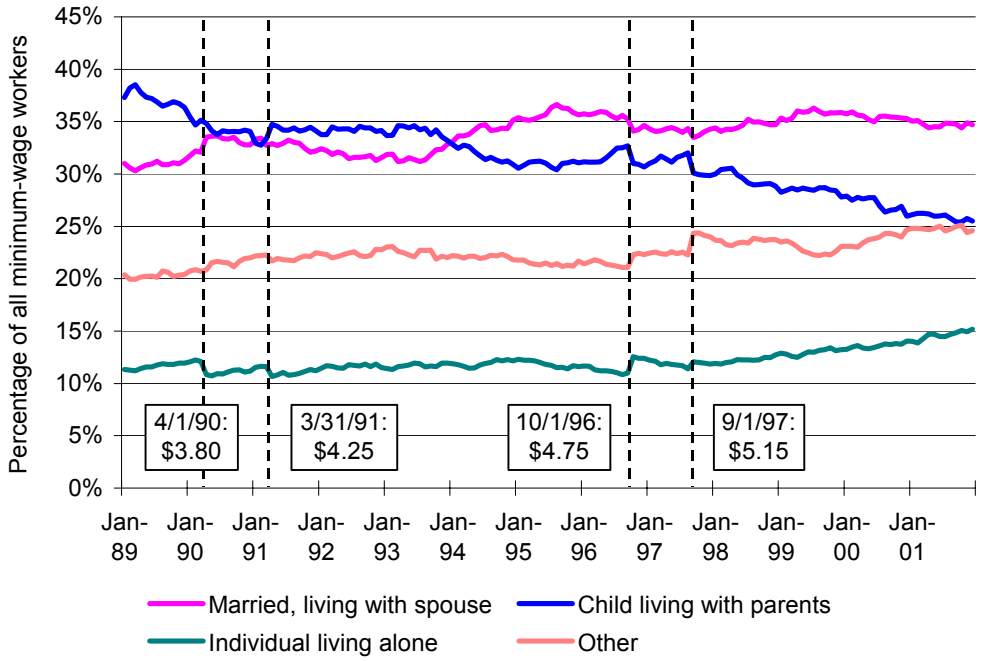


1. Computed by DLI Research & Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B.

Figure 21 shows an estimate of the poverty rate for minimum-wage workers and other workers in Minnesota. Not surprisingly, minimum-wage workers were much more likely to live in poverty than other workers. From 1989 to 2001, an average of 20 percent of minimum-wage workers lived in poverty, while only 7 percent of above-minimum-wage workers lived in poverty. In recent years, the poverty rate for minimum-wage workers has been significantly lower, however, averaging 13 percent from 1998 to 2001. It is puzzling why the poverty rate shown in Figure 21 for minimum-wage workers was so high in 1989 and 1990. The average U.S. poverty rate for minimum-wage workers in 1989 and 1990 was 30 percent. This was not much different from the average poverty rate for minimum-wage workers in the United States for the whole period, which was 27.5 percent.

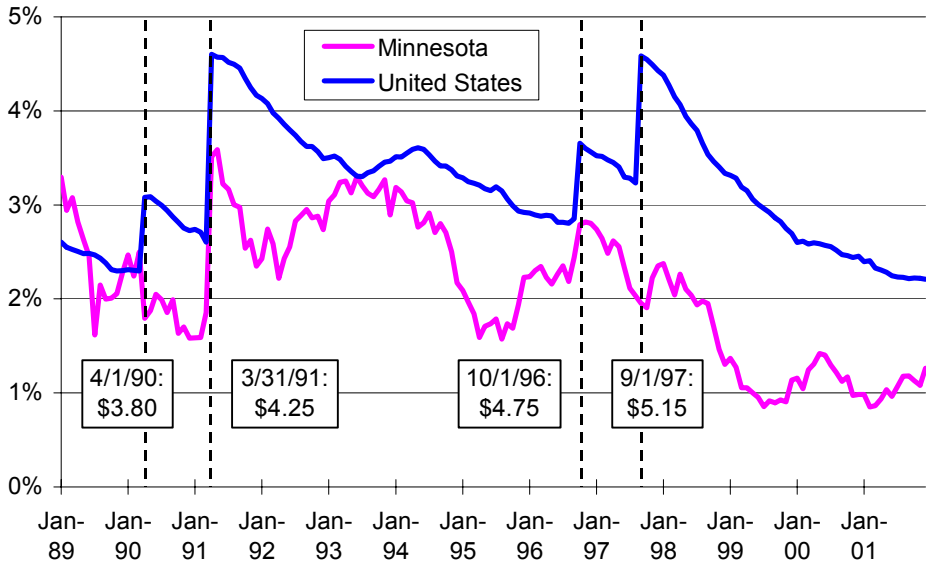
Family status may also be an indicator of the well-being of minimum-wage workers. It is probably much more troubling, for example, if many people who earn the minimum wage are raising children, than it is if many people who earn the minimum wage are children who are living with their parents. Figure 22 shows changes in the family status of minimum-wage workers from 1989 to 2001. Overall, the changes in the family status of minimum-wage workers do not appear to be positive. In particular, the share of minimum-wage workers who are children living with their parents has fallen significantly — from about 35 percent in 1989 to about 25 percent in 2001. The shares composed of minimum-wage workers with another family status — married workers, single workers living alone and other workers — all rose. These changes in family status point to potential problems in population of minimum-wage workers, even if other indicators of their status have seemed to improve.

Figure 22
Family status of minimum-wage workers, United States, 1989-2001 [1]



1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B.

Figure 23
Minimum-wage workers as percentage of 25-54-year-old wage-and-salary workers, Minnesota and the United States, 1989-2001 [1]



1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B.

Age, gender, race, and education

The average worker in Minnesota from 1989 through 2001 was 38.1 years old. The average age of the labor force increased by about three and a half years between 1989 and 2001, from slightly more than 36 years old in 1989 to slightly less than 40 years old by 2001. For the entire 1989 to 2001 period, the average age in the United States was very similar — 38.3 years old. The average age in the United States increased by only two years from 1989 to 2001, however.

Figure 23 shows the percentage of minimum-wage workers among 25-54-year-old in the United States and Minnesota. The presence of minimum-wage workers in this group may indicate a greater social problem than the presence of minimum-wage workers among older or younger workers. Workers age 25 to 54 are more likely to be supporting a family than younger workers and their earnings are less likely to be supplemented by retirement income than older workers. The percentage of workers in this group earning the minimum wage has been lower in Minnesota than it has been in the United States. Since 1999, between 1 and 1.5 percent of workers from 25 to 54 were minimum-wage workers in Minnesota, but about 2.5 percent were minimum-wage workers in the United States. On average, workers 25 to 54 made up 45 percent of minimum-wage workers in the United States and 39 percent in Minnesota. The decline in Minnesota came mainly because of increases in the share of workers 55 and older earning the minimum wage. It is not clear what drove this large increase in the share of older workers earning the minimum wage. In the United States changes in shares over time were small.

The share of women who are minimum-wage workers was similar in Minnesota and the United States through most of the 1990s. From 1989 through 2001 women made up 62.5 percent of minimum-wage workers in Minnesota and 61.1 percent in the United States. Overall during this period women made up 49.2 percent of all workers in Minnesota and 47.1 percent in the United States. One feature of the Minnesota economy has been high labor-force-participation rates, especially among women. The labor force consists of people who are employed or seeking work.[14] Examples of people who are not in the labor force are people who are retired or who are full-time students. The labor-force-participation rate is the share of people who are in the labor force. Figure 24 shows the female labor-force-participation rate in Minnesota and the United States from 1989 through 2001. The female labor-force-participation rate in Minnesota is currently almost 10 points higher than it is in the United States.

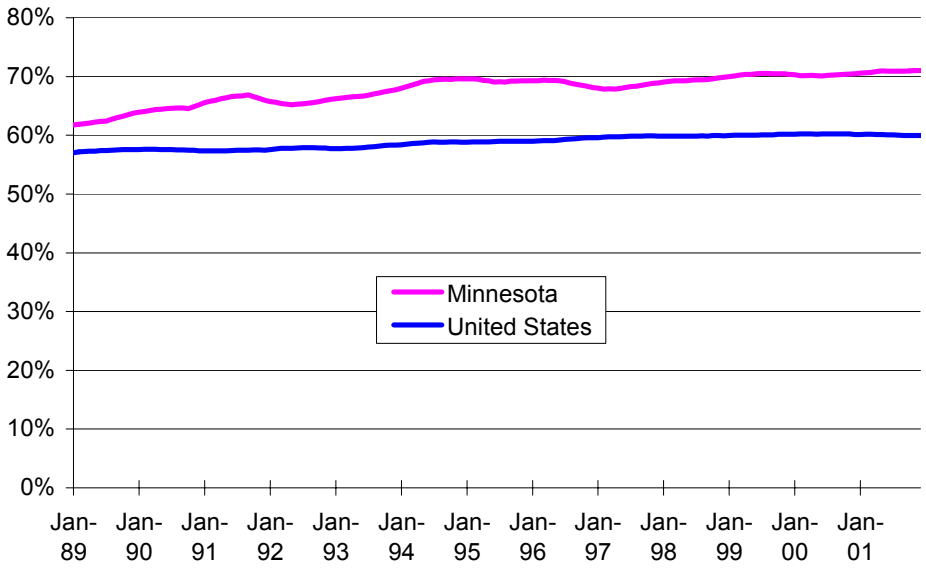
Trends in the race of minimum-wage workers in Minnesota are uncertain, because the number of minority workers who earn the minimum wage is so small.[15] Nationally, it is clear that minority workers are over-represented among minimum-wage workers. In the United States, Black and Hispanic workers are somewhat over-represented among minimum-wage workers. Black workers made up 11.3 percent of the work force from 1989 through 2001, but they accounted for 13.6 percent of minimum-wage workers. For Hispanic workers, the numbers are 9.8 and 14.3 percent.[16] The actual status of black and Hispanic workers in regard to the number of minimum-wage workers may be even worse than these numbers indicate. For workers between 25 and 54 years old, 4.1 percent of black, non-Hispanic workers were minimum-wage workers, compared to 5.7 percent of Hispanic workers and 2.7 percent of white, non-Hispanic workers. Black and Hispanic workers who are from 25 to 54 years old are almost twice as likely to be minimum-wage workers as white workers are. For workers age 16 to 24, the shares were 15.0, 13.2 and 12.9 percent, respectively. The better relative numbers for young black and Hispanic workers may actually represent a problem; the numbers may look as good as they do because many young blacks and Hispanics may not be able to find jobs at all.

[14] All employed, paid workers are considered to be in the labor force. Employed unpaid workers are also in the labor force if they work more than 15 hours a week.

[15] Methods for calculating numbers of minimum-wage workers in this series of reports were different before 2001. These differences were particularly large for estimates of the number of minimum-wage workers for some races.

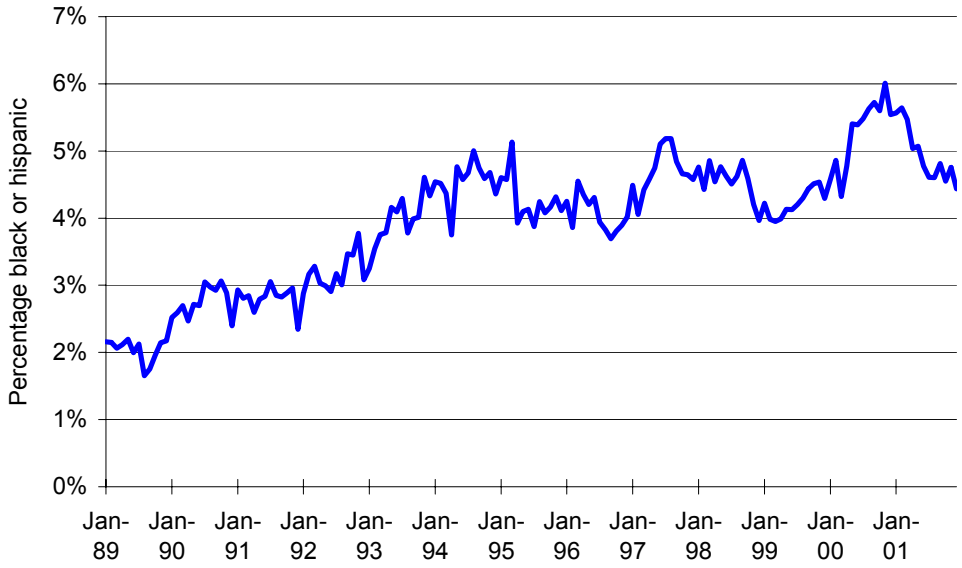
[16] The groups of black and Hispanic workers are not mutually exclusive, i.e., a person can be both black and Hispanic.

Figure 24
Female labor-force-participation rate, Minnesota and the United States, 1989-2001 [1]



1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B.

Figure 25
Black and Hispanic workers among wage-and salary-workers in Minnesota, 1989-2001 [1]



1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B.

In Minnesota, black workers made up only 2.4 percent of the work force and Hispanic workers made up 1.6 percent. There is not enough data to tell whether black and Hispanic workers in Minnesota are over-represented among minimum-wage workers. Results that hold true for black and Hispanic workers in the United States may not hold true for these groups in Minnesota, because immigration status, language and work experience all may differ systematically for minority workers in Minnesota and the United States.

One difference between the groups of workers is that the number of Hispanic workers is increasing much faster than the number of black workers. While the average number of black workers was greater than the number of Hispanic workers from 1989 to 2001 in both the United States and Minnesota, for 2001 the numbers appear to be nearly equal in both places. Figure 25 shows the share of Minnesota's workers that are black or Hispanic from 1989 to 2001. The share rose from 2 or 3 percent in 1989 and 1990 to about 5 percent by 2001.

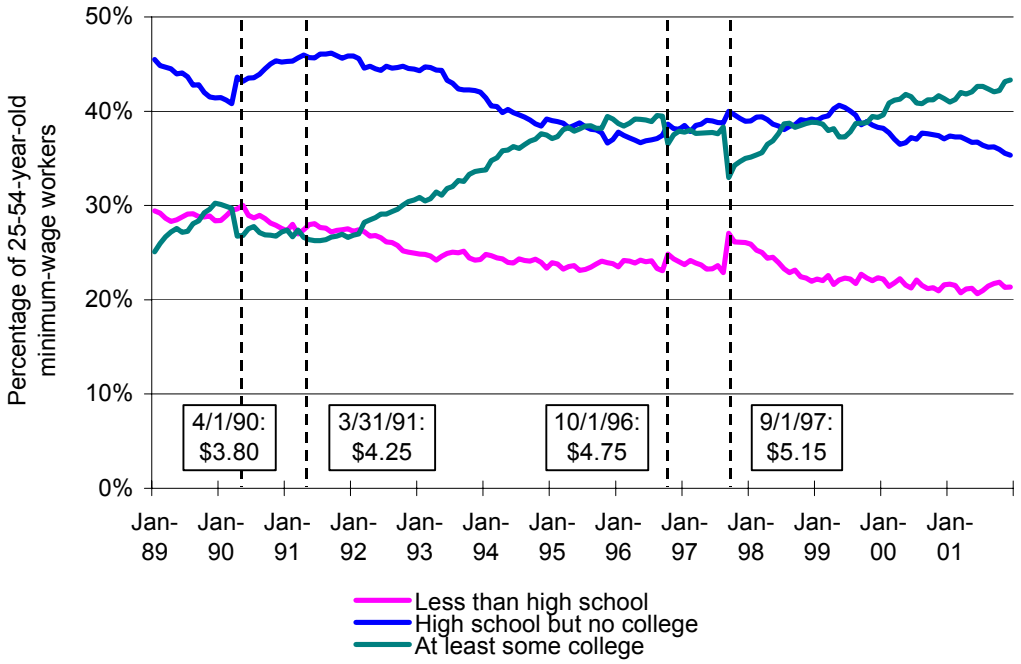
Education is an important determinant of earnings, but education alone is not enough to accurately predict earnings. Many other factors, such as industry, occupation and experience are also important. A problem in comparing the effect of education on earnings is that the level of education is related to age, especially for the young workers who are most likely to be minimum-wage workers. This means that changes in the number of young people in the labor force can greatly affect wage and education levels. To make the effects of education easier to interpret, relationships of education levels to wages are examined only for workers who are from 25 to 54 years old.[17]

The education level of the work force rose significantly in both Minnesota and the United States from 1989 to 2001. The share of the 25-54-year-old work force that had obtained at least some college education rose from 55 percent in the first two years of this period in Minnesota to 70 percent in the last two years. The share rose in the United States too, but not as quickly; in the United States, the corresponding numbers were 52 and 60 percent. In Minnesota, the share of the 25-54-year-old age group that had not completed 12th grade fell from 5 percent in 1989 and 1990 to 2 percent in 2000 and 2001. In the United States, the corresponding shares were 11 percent and 8 percent.

Figure 26 shows the share of U.S. workers earning the minimum wage with each of three different education levels. Changes in the minimum wage seemed to affect the shares of workers with different educational levels in roughly similar ways. Changes in the share of minimum-wage workers in each group were not large over time, but major fluctuations occurred as the real value of the minimum wage changed. Workers with higher levels of education were significantly less likely to be minimum-wage workers than workers with lower levels were. Somewhat surprisingly, the share of minimum-wage workers rose for workers with some college and fell for less-educated workers. It is not clear that this trend is particularly important, however, because such a small fraction of workers with some college receive the minimum wage. It could be that increasing college attendance drives this trend as more students from relatively poorer households go to college.

[17] An additional problem is that people with higher education levels probably earn higher wages, both because they have more education and because they have other advantages that make it easier for them to get a better education. This means that part of the premium that people with more education receive will be due to their innate ability or other advantages, such as having wealthier parents.

Figure 26
Educational attainment of minimum-wage and nonminimum-wage workers in Minnesota, 1989-2001 [1]



1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B.

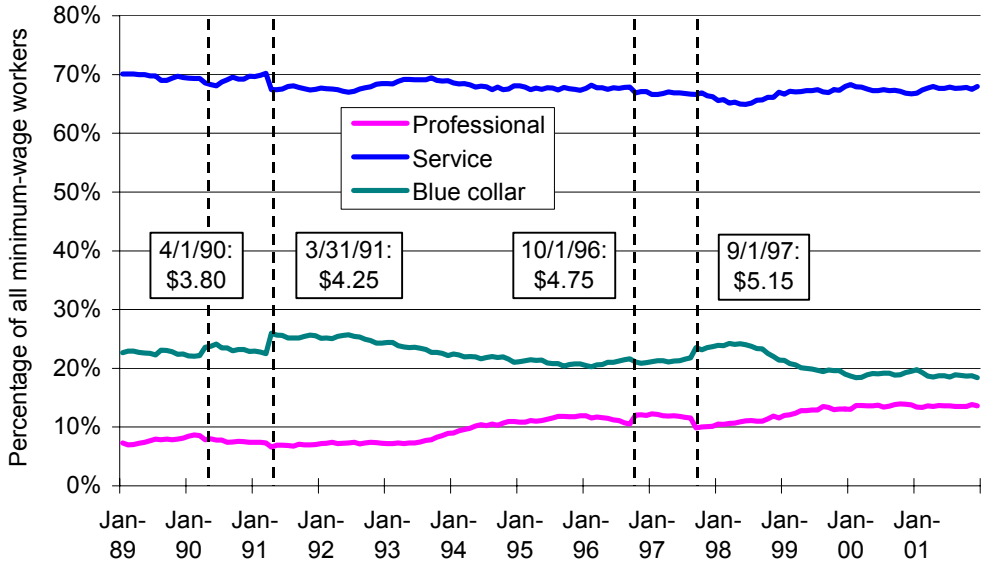
Industry, occupation, unionization and location

Industry and occupation are important determinants of wage level. Some industries and occupations are better predictors of wage level than others, though. The wages of people performing computer support, for example, vary much more with education than the wages of people engaged in retail trade. Most major industry groups have relatively few minimum-wage workers. In the United States, shares of minimum-wage workers are lower than average in most major industries: construction, manufacturing, transportation, wholesale trade, financial services, health and social services, and public administration. Shares are higher than average in only three main industry groups: retail trade, educational services and other services. Shares for educational services are only slightly higher than average, but shares in retail trade and other services are 3 or 4 times higher than for the overall work force.

Occupation is also an important determinant of wage level. Figure 27 shows the share of U.S. minimum-wage workers who come from each of three occupational groups: the professional, blue collar, and service groups.[18] From 1989 to 2001, approximately 70 percent of minimum-wage workers were service workers, while only 20 percent were blue-collar workers. Overall in the United States approximately 42 percent of all workers were employed in services, 28 percent as blue-collar workers and 30 percent as professionals.

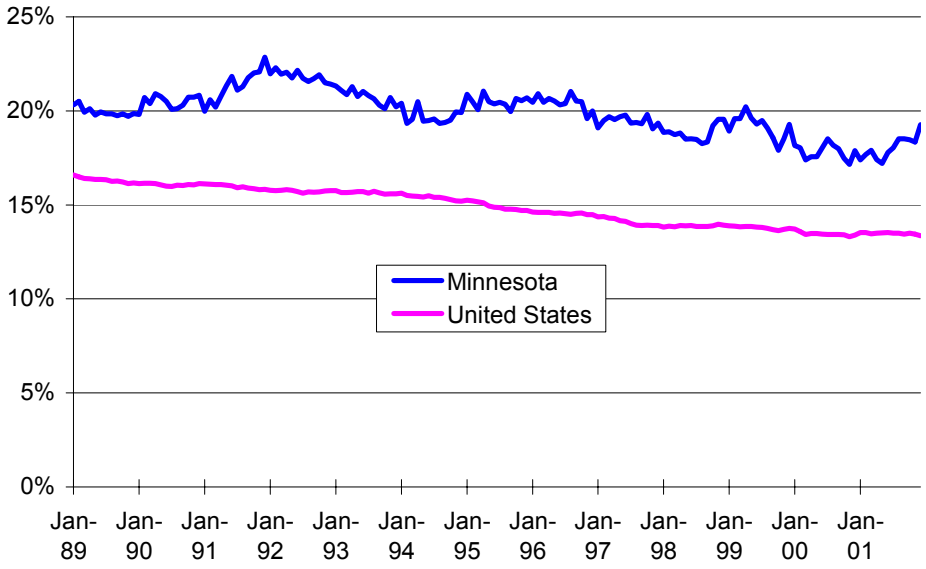
[18] Occupations in the professional sector include managers, administrators, teachers, lawyers and engineers. Occupations in the service sector include sales and personal services. Occupations in the blue-collar sector include mechanics, machine operators, construction workers and motor-vehicle operators.

Figure 27
Occupational group of minimum-wage workers, United States, 1989-2001 [1]



1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B.

Figure 28
Union membership rate among wage-and-salary workers, Minnesota and the United States, 1989-2001 [1]



1. Computed by DLI Research & Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B.

Workers who are union members are unlikely to be minimum-wage workers. Nationwide, only 3.1 percent of union members were minimum-wage workers, compared to 5.2 percent of all workers. Overall, the share of unionized workers dropped somewhat from 1989 to 2001. Figure 28 shows these changes. In the United States the share fell from 16.2 percent in 1989 and 1990 to 13.5 percent in 2000 and 2001. In Minnesota, the share of unionized workers started out much higher and did not fall as quickly; it was 20 percent in 1989 and 1990, and 18 percent in 2000 and 2001.

Workers in major cities tend to earn more than workers outside these cities. In the United States, 22 percent of the work force lives outside of Metropolitan Statistical Areas (MSAs),[19] while 32 percent of minimum-wage workers live outside of MSAs. In Minnesota, the corresponding numbers are 71 and 53 percent. The effects of the higher wages received in MSAs are important enough to compensate for the presence of some other characteristics that would tend to push up the number of minimum-wage workers — the presence of more women, young workers and minority workers, for example.

[19] The U.S. Census Bureau defines MSAs, which are generally cities and their surrounding suburbs.

Appendix A

Minnesota minimum-wage statute

The following is Minnesota Statutes §177.23, 177.24 and 177.28 as of 2002.[20]

177.23 Definitions.

Subdivision 1. **Scope.** Unless the language or context clearly indicates that a different meaning is intended, the following terms, for the purposes of sections 177.21 to 177.35, have the meanings given to them in this section.

Subd. 2. **Department.** "Department" means the department of labor and industry.

Subd. 3. **Commissioner.** "Commissioner" means the commissioner of labor and industry or authorized designee or representative.

Subd. 4. **Wage.** "Wage" means compensation due to an employee by reason of employment, payable in legal tender of the United States, check on banks convertible into cash on demand at full face value or, except for instances of written objection to the employer by the employee, direct deposit to the employee's choice of demand deposit account, subject to allowances permitted by rules of the department under section 177.28.

Subd. 5. **Employ.** "Employ" means to permit to work.

Subd. 6. **Employer.** "Employer" means any individual, partnership, association, corporation, business trust, or any person or group of persons acting directly or indirectly in the interest of an employer in relation to an employee.

Subd. 7. **Employee.** "Employee" means any individual employed by an employer but does not include:

(1) two or fewer specified individuals employed at any given time in agriculture on a farming unit or operation who are paid a salary;

(2) any individual employed in agriculture on a farming unit or operation who is paid a salary greater than the individual would be paid if the individual worked 48 hours at the state minimum wage plus 17 hours at 1-1/2 times the state minimum wage per week;

(3) an individual under 18 who is employed in agriculture on a farm to perform services other than corn detasseling or hand field work when one or both of that minor hand field worker's parents or physical custodians are also hand field workers;

(4) for purposes of section 177.24, an individual under 18 who is employed as a corn detasseler;

(5) any staff member employed on a seasonal basis by an organization for work in an organized resident or day camp operating under a permit issued under section 144.72;

(6) any individual employed in a bona fide executive, administrative, or professional capacity, or a salesperson who conducts no more than 20 percent of sales on the premises of the employer;

(7) any individual who renders service gratuitously for a nonprofit organization;

(8) any individual who serves as an elected official for a political subdivision or who serves on any governmental board, commission, committee or other similar body, or who renders service gratuitously for a political subdivision;

(9) any individual employed by a political subdivision to provide police or fire protection services or employed by an entity whose

[20] Taken from the Web site of the Minnesota Revisor of Statutes, www.revisor.leg.state.mn.us/stats/177/.

principal purpose is to provide police or fire protection services to a political subdivision;

(10) any individual employed by a political subdivision who is ineligible for membership in the public employees retirement association under section 353.01, subdivision 2b, clause (1), (2), (4), or (9);

(11) any driver employed by an employer engaged in the business of operating taxicabs;

(12) any individual engaged in babysitting as a sole practitioner;

(13) for the purpose of section 177.25, any individual employed on a seasonal basis in a carnival, circus, fair, or ski facility;

(14) any individual under 18 working less than 20 hours per workweek for a municipality as part of a recreational program;

(15) any individual employed by the state as a natural resource manager 1, 2, or 3 (conservation officer);

(16) any individual in a position for which the United States Department of Transportation has power to establish qualifications and maximum hours of service under United States Code, title 49, section 304;

(17) any individual employed as a seafarer. The term "seafarer" means a master of a vessel or any person subject to the authority, direction, and control of the master who is exempt from federal overtime standards under United States Code, title 29, section 213(b)(6), including but not limited to pilots, sailors, engineers, radio operators, firefighters, security guards, pursers, surgeons, cooks, and stewards;

(18) any individual employed by a county in a single-family residence owned by a county home school as authorized under section 260B.060 if the residence is an extension facility of that county home school, and if the individual as part of the employment duties resides at the residence for the purpose of supervising children as defined by section 260C.007, subdivision 4; or

(19) nuns, monks, priests, lay brothers, lay sisters, ministers, deacons, and other members of religious orders who serve pursuant to their religious obligations in schools, hospitals, and other nonprofit institutions operated by the church or religious order.

Subd. 8. **Occupation.** "Occupation" means any occupation, service, trade, business, industry, or branch or group of industries or employment or class of employment in which employees are gainfully employed.

Subd. 9. **Gratuities.** "Gratuities" means monetary contributions received directly or indirectly by an employee from a guest, patron, or customer for services rendered and includes an obligatory charge assessed to customers, guests or patrons which might reasonably be construed by the guest, customer, or patron as being a payment for personal services rendered by an employee and for which no clear and conspicuous notice is given by the employer to the customer, guest, or patron that the charge is not the property of the employee.

Subd. 10. **On-site employee; hours worked.** With respect to any caretaker, manager, or other on-site employee of a residential building or buildings whose principal place of residence is in the residential building, including a caretaker, manager, or other on-site employee who receives a principal place of residence as full or partial compensation for duties performed for an employer, the term "hours worked" includes time when the caretaker, manager, or other on-site employee is performing any duties of employment, but does not mean time when the caretaker, manager, or other on-site employee is on the premises and available to perform duties of employment and is not performing duties of employment.

Subd. 11. **Companionship services; hours.** With respect to an individual who is: (1) employed to provide companionship services to individuals who, because of age or infirmity, are unable to care for their own needs; (2) employed to stay overnight in the home of such an aged or infirm individual; and (3) paid the minimum wage or more for at least four hours associated with the overnight stay, the term "hours" for the purposes of requiring the payment of minimum

wages and overtime premiums under sections 177.24 and 177.25, shall not include nighttime hours, from 10:00 p.m. to 9:00 a.m., up to a total of eight hours per night, during which the employee is available to perform duties for the aged or infirm individual, but is not in fact performing such duties and is free to sleep and otherwise engage in normal private pursuits in the aged or infirm individual's home. For the purposes of this subdivision, the term "companionship services" is defined in Code of Federal Regulations, title 29, sections 552.6 and 552.106 as of March 1, 1984.

HIST: 1973 c 721 s 3; 1974 c 406 s 88; 1975 c 399 s 1; 1977 c 369 s 1; 1978 c 586 s 1; 1978 c 731 s 1; 1979 c 281 s 1; 1980 c 415 s 1; 1982 c 424 s 46-48; 1982 c 625 s 14; 1983 c 60 s 1; 1983 c 122 s 1; 1984 c 614 s 1; 1984 c 628 art 4 s 1; 1Sp1985 c 13 s 274,275; 1986 c 390 s 2; 1986 c 444; 1990 c 418 s 1; 1992 c 464 art 1 s 24; 1999 c 139 art 4 s 2; 2001 c 178 art 1 s 44

177.24 Payment of minimum wages.

Subdivision 1. **Amount.** (a) For purposes of this subdivision, the terms defined in this paragraph have the meanings given them.

(1) "Large employer" means an enterprise whose annual gross volume of sales made or business done is not less than $500,000 (exclusive of excise taxes at the retail level that are separately stated) and covered by the Minnesota Fair Labor Standards Act, sections 177.21 to 177.35.

(2) "Small employer" means an enterprise whose annual gross volume of sales made or business done is less than $500,000 (exclusive of excise taxes at the retail level that are separately stated) and covered by the Minnesota Fair Labor Standards Act, sections 177.21 to 177.35.

(b) Except as otherwise provided in sections 177.21 to 177.35, every large employer must pay each employee wages at a rate of at least $5.15 an hour beginning September 1, 1997. Every small employer must pay each employee at a rate of at least $4.90 an hour beginning January 1, 1998.

(c) Notwithstanding paragraph (b), during the first 90 consecutive days of employment, an employer may pay an employee under the age of 20 years a wage of $4.25 an hour. No employer may take any action to displace any employee, including a partial displacement through a reduction in hours, wages, or employment benefits, in order to hire an employee at the wage authorized in this paragraph.

Subd. 1a. Expired

Subd. 2. **Gratuities not applied.** No employer may directly or indirectly credit, apply, or utilize gratuities towards payment of the minimum wage set by this section or federal law.

Subd. 3. **Sharing of gratuities.** For purposes of this chapter, any gratuity received by an employee or deposited in or about a place of business for personal services rendered by an employee is the sole property of the employee. No employer may require an employee to contribute or share a gratuity received by the employee with the employer or other employees or to contribute any or all of the gratuity to a fund or pool operated for the benefit of the employer or employees. This section does not prevent an employee from voluntarily and individually sharing gratuities with other employees. The agreement to share gratuities must be made by the employees free of any employer participation. The commissioner may require the employer to pay restitution in the amount of the gratuities diverted. If the records maintained by the employer do not provide sufficient information to determine the exact amount of gratuities diverted, the commissioner may make a determination of gratuities diverted based on available evidence and mediate a settlement with the employer.

Subd. 4. **Unreimbursed expenses deducted.** Deductions, direct or indirect, from wages or gratuities not authorized by this subdivision may only be taken as authorized by sections 177.28, subdivision 3, 181.06, and 181.79. Deductions, direct or indirect, for up to the full cost of the uniform or equipment as listed below, may not exceed $50. No deductions, direct or indirect,

may be made for the items listed below which when subtracted from wages would reduce the wages below the minimum wage:

(a) purchased or rented uniforms or specially designed clothing required by the employer, by the nature of the employment, or by statute as a condition of employment, which is not generally appropriate for use except in that employment;

(b) purchased or rented equipment used in employment, except tools of a trade, a motor vehicle, or any other equipment which may be used outside the employment;

(c) consumable supplies required in the course of that employment;

(d) travel expenses in the course of employment except those incurred in traveling to and from the employee's residence and place of employment.

Subd. 5. **Expense reimbursement.** An employer, at the termination of an employee's employment, must reimburse the full amount deducted, directly or indirectly, for any of the items listed in subdivision 4. When reimbursement is made, the employer may require the employee to surrender any existing items for which the employer provided reimbursement.

HIST: 1973 c 721 s 4; 1976 c 165 s 1; 1977 c 183 s 1; 1977 c 369 s 2; 1979 c 281 s 2; 1981 c 87 s 1,2; 1984 c 628 art 4 s 1; 1Sp1985 c 13 s 276-278; 1986 c 444; 1987 c 324 s 1; 1987 c 384 art 2 s 45; 1990 c 418 s 2-4; 1996 c 305 art 1 s 49,50; 2Sp1997 c 1 s 1

177.28 Power to make rules.

Subdivision 1. **General authority.** The commissioner may adopt rules, including definitions of terms, to carry out the purposes of sections 177.21 to 177.35, to prevent the circumvention or evasion of those sections, and to safeguard the minimum wage and overtime rates established by sections 177.24 and 177.25.

Subd. 2. Repealed, 1988 c 629 s 64

Subd. 3. **Rules required.** The commissioner shall adopt rules under sections 177.21 to 177.35 defining and governing:

(1) salespeople who conduct no more than 20 percent of their sales on the premises of the employer;

(2) allowances as part of the wage rates for board, lodging, and other facilities or services furnished by the employer and used by the employees;

(3) bonuses;

(4) part-time rates;

(5) special pay for special or extra work;

(6) procedures in contested cases;

(7) other facilities or services furnished by employers and used by employees; and

(8) other special items usual in a particular employer-employee relationship.

Subd. 4. Repealed, 1996 c 305 art 1 s 52

Subd. 5. **Rules regarding handicapped.** In order to prevent curtailment of opportunities for employment, avoid undue hardship, and safeguard the minimum wage rates under sections 177.24 and 177.25, the department shall also issue rules providing for the employment of handicapped workers at wages lower than the wage rates applicable under sections 177.24 and 177.25, under permits and for periods of time as specified therein. The rules must provide for the employment of learners and apprentices at wages lower than the wage rates applicable under sections 177.24 and 177.25, under permits and subject to limitations on number, proportion, length of learning period, occupations, and other conditions as the department may prescribe. The rules must provide that where a handicapped person is performing or is being considered for employment where work must be performed which is equal to work performed by a nonhandicapped person, the handicapped person must be paid the same wage as a

nonhandicapped person with similar experience and skill.

Subd. 6. **Administrative Procedure Act to apply.** The rules are subject to the provisions of chapter 14.

HIST: 1973 c 721 s 8; 1976 c 165 s 2; 1977 c 369 s 3; 1982 c 424 s 50; 1984 c 628 art 4 s 1; 1984 c 636 s 1; 1Sp1985 c 13 s 280; 1986 c 444

Appendix B

Data and estimation technique

The data for this report comes from the Current Population Survey (CPS). The CPS is a monthly survey of U.S. households conducted by the U.S. Bureau of Labor Statistics. As of October 2002, the survey included some 57,000 households nationwide and 1,100 in Minnesota.

Wages for hourly workers were available directly from the CPS data. For nonhourly (salaried) workers, wages were calculated by dividing weekly pay at the worker's main job by the usual number of hours worked a week, or, if this was not reported, the number of hours worked in the survey week.

Because of the small numbers of sample cases in many categories for this report, sampling variation is an important issue. To deal with this issue, the statistics in Part 1 of this report were estimated with a combination of Minnesota and U.S. data. The following material describes the estimation of the numbers of workers and of minimum-wage workers in the groups used in the figures (age, gender, etc.) in Part 1.

***Grand total number of workers*—**The grand total number of Minnesota workers for 2002 was calculated directly from the Minnesota CPS data.

***Total number of workers by group*—**The first step was to compute, for each group (e.g. 16-19-year-old males), the ratio of the number of workers in that group to the grand total number of workers for Minnesota, averaged over 2000 through 2002. This ratio was then applied to the grand total number of workers for 2002 to estimate the number of workers in the group for 2002.

***Total number of minimum-wage workers*—**The first step was to compute Minnesota's ratio of the total number of minimum-wage workers to the grand total number of workers as an average over 2000 through 2002. It was assumed that the Minnesota ratio changed by the same proportionate amount between 2001 (the mid-point of the 2000-2002 average) and 2002 as did the same ratio for the United States. Thus, Minnesota's ratio for 2002 was estimated by multiplying the state's average ratio for 2000-2002 by the percent change in the U.S. ratio from 2001 to 2002. Then Minnesota's total number of minimum-wage workers for 2002 was estimated by applying the state's estimated ratio for 2002 to the grand total number of workers for that year.

***Number of minimum-wage workers by group*—**The first step was to compute an initial estimate of the number of minimum-wage workers in each group by applying the U.S. ratio of minimum-wage workers to total workers in the group to the Minnesota total number of workers in the group. The initial estimate for each group was too large, because minimum-wage workers make up a larger proportion of the U.S. work force than of the Minnesota work force (3.3 percent vs. 2.3 percent for 2002). Therefore, the Minnesota estimates were scaled proportionately downward so the sum of the estimated numbers for the different groups was equal to Minnesota's total number of minimum-wage workers.[21]

[21] Details are available from DLI Research and Statistics, (651) 284-5025.

Appendix C

Broader trends for low-wage workers

This appendix examines trends for other groups of low-wage workers besides minimum-wage workers. Low-wage workers are not defined precisely, but include minimum-wage workers and other workers earning significantly less than the average hourly wage. Many issues concerning minimum-wage workers also concern other low-wage workers.

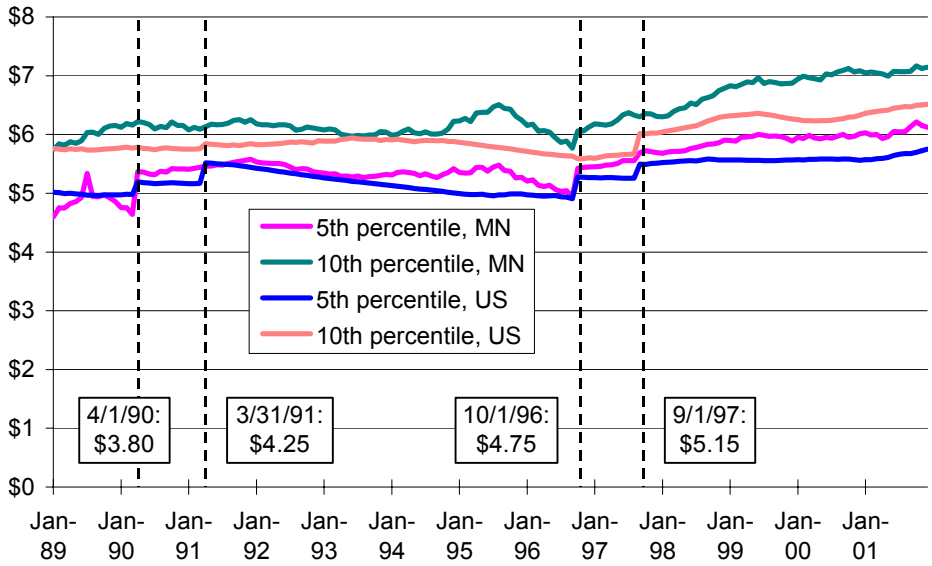
One convenient way to track workers by different wage levels is by looking at the wages of workers in a specific percentile. The 5th percentile wage, for example, is defined to be the highest wage that is earned by any worker in the lowest 5 percent of all workers. Figure 29 shows the real hourly wage of the 5th and 10th percentile of workers. For example, for most of 1999, the 5th percentile wage was approximately $6 an hour. This means that in 1999, 5 percent of workers had wages of $6 an hour or less and 95 percent had wages of $6 an hour or more.

The trends for both the 5th and 10th percentile wages show some real growth in purchasing power from 1989 to 2001, although most of the growth occurred in 1998 and 1999. Overall, the 5th percentile wage rose 23 percent during this period and the 10th percentile wage rose by 19 percent. From 1989 to 2001, the real 10th percentile wage was on average only 22 percent higher than the minimum wage. The 10th percentile wage changed very little from 1989 to 1994. Perhaps the economic slowdown that occurred in Minnesota around the middle of this period kept these wages down. The wage rose in 1995 and fell in 1996, before starting on an upward trend. The fluctuations in 1995 and 1996 may have been caused in part by the change in the number of young workers in Minnesota or by statistical fluctuations. There was a decline in the number of young workers in 1995 and an increase in 1996. From 1997 to 2000 the wage rose from approximately $6 an hour to $7 an hour. This is a significant increase in percentage terms. The increases in the minimum wage in 1996 and 1997 may have helped raise those wages, but the more important factor was probably the strength of the economy. From 1996 to 2000, there were significant increases in wages for low-, moderate- and high-wage workers. Trends for 5th and 10th percentile wages are similar. Perhaps because the share of minimum-wage workers was seldom greater than 5 percent of the work force in Minnesota, the level the minimum wage seems to have little or no affect on the 5th percentile wage.

Examining trends for workers in different percentiles of the wage distribution provides a natural way of comparing the relative well-being of workers in different economic circumstances. Figure 30 compares the trends for the 25th, 50th and 75th percentile wages. The trend for the 50th percentile wage looks similar to the trend for the 25th percentile wage. The trend for the 75th is somewhat different, declining more from 1989 to 1992, and then increasing more steadily from 1992 to 2001. Overall, there is no clear trend in the wage distribution toward higher earnings for low-wage or high-wage workers.

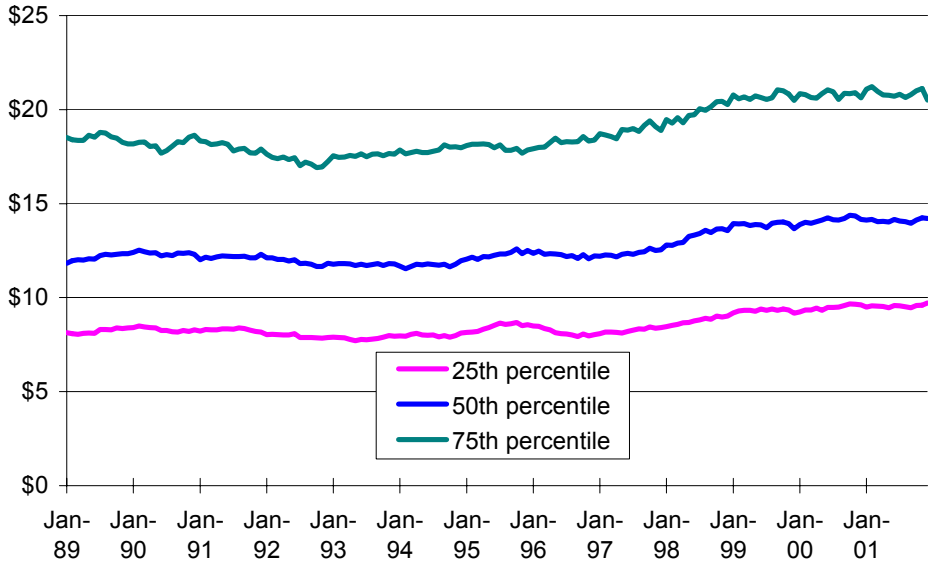
Figure 31 shows the average annual growth in real wages for different wage percentiles.

Figure 29
Real hourly wages at the 5th and 10th percentiles, Minnesota and the United States, 1989-2001 [1]



1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B. Wages are expressed in 2002 dollars.

Figure 30
Real hourly wages at the 25th , 50th and 75th percentiles in Minnesota, 1989-2001 [1]



1. Computed by DLI Research and Statistics with data from the Current Population Survey, conducted by the U.S. Bureau of Labor Statistics. See Appendix B. Wages are expressed in 2002 dollars.

Figure 31: Changes in hourly wages in Minnesota from 1989 through 2001

Percentile wage	1989 wage level	2001 wage level	Average growth
5th	4.90	5.95	1.1%
10th	5.52	6.99	1.5%
25th	7.63	9.39	1.3%
50th	11.27	13.86	1.3%
75th	17.21	20.47	1.0%
90th	24.28	28.77	0.9%
95th	28.82	36.44	1.5%

Weekly wages also provide a way to gauge how well different workers are doing. On average, low-wage workers are employed fewer hours than other workers. This means differences in hourly wage rates are magnified when weekly earnings are examined. Figure 32 shows growth in weekly wage percentiles. Note the greater dispersion in weekly wages than in hourly wages, which occurs because, on average, higher-wage workers work more hours than lower-wage workers. The 95th percentile hourly wage is approximately six times as high as the 5th percentile hourly wage, but the 95th percentile weekly wage is almost 16 times as high. Overall growth in hourly and weekly wages is similar across wage percentiles, however.

Figure 32: Changes in weekly wages from 1989 through 2001

Percentile wage	1989-90 average	2000-01 level	Average growth
5th	83	100	1.8%
10th	132	159	1.7%
25th	280	341	1.8%
50th	495	583	1.5%
75th	774	907	1.4%
90th	1,126	1,300	1.3%
95th	1,406	1,633	1.4%