Higher Minimum Wages Harm Minority and Inner-City Teens

By Mark Turner and Berna Demiralp
Johns Hopkins University

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Abstract[2]

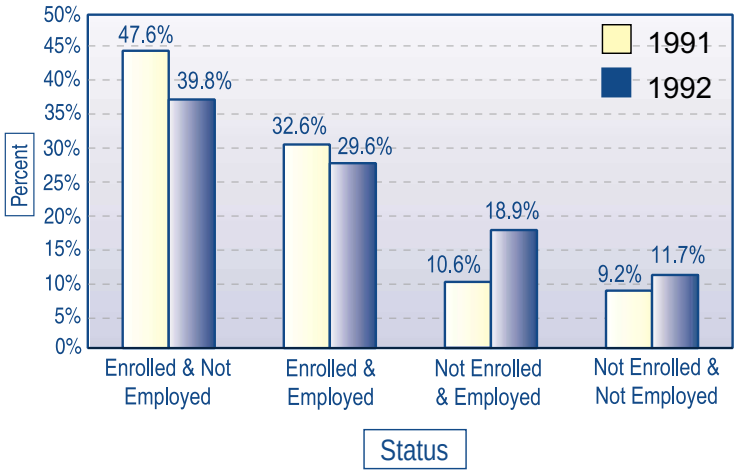
Economists and policy makers once again find themselves engaged in a heated debate over proposed legislation to increase the federal minimum wage from $5.15 to $6.15 per hour. A neglected, yet important, component of this debate is the effect of minimum wage hikes on teenagers' employment and school enrollment. The scant number of studies on this issue have yielded contradictory findings, leaving the issue unresolved.

The impact of a higher minimum wage on teen employment and school enrollment is an important issue to policy makers, in view of the demographics of minimum wage workers. Current statistics based on the 1999 Current Population Survey-Outgoing Rotation data show that teenagers between the ages of 16 and 19 represent 29.2 percent of workers who would be directly affected by the proposed increase (Bernstein and Brocht, 2000). Furthermore, a vast majority of these teenagers who would be directly affected by the proposed minimum wage are also enrolled in school (Turner 2000).

While a large body of the research solely examines the employment effects, only a few studies have investigated the impact of minimum wage hikes on teens' joint employment and educational attainment decisions. In our recent working paper entitled, "Effects of Higher Minimum Wages on Teen Employment and School Enrollment," we explore the impact of higher minimum wages on teen employment and school transitions.[3] We analyze the economic consequences of an increased minimum wage on teenagers in general and key demographic subgroups among the teenage population. As with certain studies of minimum wages, we find that some individuals gain while others lose from the mandated wage hike. Specifically, we find that the proposed $1.00 increase in the minimum wage would likely reduce employment or school enrollment among minority and inner-city teenagers, leaving more of them idle. On the other hand, we find that the wage hike would reduce the idleness of teenagers who are white, or who reside outside central cities. Overall, our paper predicts that the proposed minimum wage hike would increase teen employment and reduce the number of teens idle — neither working nor in school.

Using individual-level data from the early 1990s, we are able to estimate the impact of a higher minimum wage — $6.15 an hour, as urged by the President — on today's teens. The analytical dataset includes 2,747 teens who are 16 to 19 years old dur-

Figure 1. Employment and Enrollment Status of Teenagers in 1991 and 1992



ing the initial interview in the 1991 school year (January through April). These same teens are reinterviewed the following year when they are 17 to 20 years old.[4] The main study variable, teens' school enrollment and employment status in each year has four categories: enrolled/employed (SE), enrolled/not-employed (SNE), not-enrolled/employed (NSE), and not-enrolled/not-employed (NSNE). As shown in Figure 1, the youth population tends to gravitate from school toward work as it ages by a year. However, interestingly, the fraction of the cohort that is idle — neither working nor in school — is actually higher in 1992. This is indicative of school-to-work transition problems that some teens face.

Employers in each state generally must pay their employees the higher of the state or federal minimum wages, which is the effective minimum wage. During the analysis period, 1991 through 1992, the federal minimum wage increased by 45 cents, from $3.80 to $4.25 per hour. Twelve states in 1990 and eight states in 1991 had binding state minimum wages that exceeded the federal minimum wage.

To isolate the effects of a minimum wage hike from other confounding factors, we estimate a multivariate multinomial logit model. Other independent variables in this model include lagged enrollment/employment status, age, race, gender, urban status, census division, state prime-aged male unemployment rate, and state manufacturing wage.[5] Overall, the increase in the minimum wage proposed by President Clinton would increase transitions into jobs and out of school by 17.2 percentage points for teens initially in school but not employed.[6] In addition, a minimum wage hike significantly decreases the probability of becoming idle for teens in general. For example, teens initially idle are nearly 13 percentage points less likely to remain idle following a minimum wage hike. Our results suggest that an overwhelming proportion of teens who are initially idle remain out of school but become employed following a $1 minimum wage hike.

However, this is not the end of the story. We also investigate the differential effects of the minimum wage increase on subgroups by race and urban status. Differential analysis reveals important differences in the way that black and Hispanic, and non-black, non-Hispanic teens would be affected by the proposed minimum wage increase. We find that black and Hispanic teens initially employed and/or in school are more likely to become idle following a minimum wage increase, while similarly-situated non-black, non-Hispanic teens are less likely to become idle.[7] For example, black and Hispanic teens initially enrolled and employed are 33.7 percentage points more likely to become idle following a $1 minimum wage increase. In addition, our results suggest that while black and Hispanic teens move out of employment and enrollment into idleness, non-black, non-Hispanic teens are more likely to become employed.

A comparison of teens who live in central cities and those who live outside central cities also reveals several differences in their employment and school enrollment transitions in response to a minimum wage increase. The general pattern among teens living outside central cities is to show greater movement out of school enrollment and into work following a minimum wage increase. On the other hand, minimum wage increases appear to have different, but statistically insignificant, effects on teens living in central cities. Minimum wage hikes raise the likelihood that central city teens who are initially not employed would shift into idleness. On the other hand, following a minimum wage increase, employed teens in central cities are more likely to not work and return to (or remain in) school or become idle. In general, higher minimum wages are estimated to reduce the likelihood of becoming idle for teens outside central cities regardless of their initial enrollment/employment status.

Conclusion

The recent proposal to increase the federal minimum wage from $5.15 to $6.15 per hour has opened a new debate among scholars and policy makers. We believe that the effects of minimum wage on school and work decisions of teens should play a more central role in this debate, which has traditionally focused mostly on employment effects. Our findings imply that an increase in the minimum wage has significant consequences on

the educational attainment and labor market activities of teens. Our aggregate results suggest that higher minimum wages increase employment and reduce the probability of idleness among teens regardless of their initial status. However, when we focus on the outcomes for certain sub-groups, we find that black and Hispanic teens and teens in central cities are more likely to become idle, not-enrolled and not-employed, as a result of a minimum wage increase.

Our study is consistent with some earlier studies in highlighting the detrimental effect higher minimum wages have on potentially vulnerable groups of the teenage population—blacks and Hispanics, and those living in central cities. More research is needed to identify why some teens apparently benefit from minimum wage hikes while other groups suffer. Nonetheless, our study, in combination with earlier studies, should give proponents of a higher minimum wage pause.

References

Bernstein, Jared, and Chauna Brocht. 2000. The Next Step: *The New Minimum Wage Proposal and the Old Opposition*. Economic Policy Institute, Issue Brief #130B, (March).

Neumark, David and William Wascher. 1995. "Minimum-Wage Effects on School and Work Transitions of Teenagers." *American Economic Review*, Vol. 85, No. 2 (May).

Turner, Mark. 2000. "Do Minimum Wages Help or Hurt Low-Wage Workers?" in *The Low-Wage Labor Market: Challenges and Opportunities for Economic Self-Sufficiency*. By Kelleen Kaye and Demetra Smith Nightingale. U.S. Department of Health and Human Services, Washington, D.C.

Endnotes

[1] Mark Turner is a Research Scientist at the Institute for Policy Studies and Berna Demiralp is a graduate student in the Department of Economics.

[2] This abstract is an extension of Turner and Demiralp's working paper, "Effects of Higher Minimum Wages on Teen Employment and School Enrollment."

[3] The full paper is available upon request from the authors.

[4] Respondents are interviewed every four months, and they answer questions about activity during the previous four months. Each respondent is interviewed eight times, generating 32 months of data. The SIPP uses a rotating, staggered interview design whereby one-fourth of the sample is interviewed each month.

[5] Our methodological approach is nearly identical to that used in David Neumark and William Wascher, "Minimum-Wage Effects on School and Work Transitions of Teenagers," *American Economic Review,* Vol. 85, No. 2 (May 1995*).*

[6] Source tables available in full report.

[7] (See Table 2) At the $5.15 minimum wage, 33.3% of black and Hispanic teens enrolled and employed in the first year move into idleness, not enrolled or employed, in the following year. At the $6.15 minimum wage, 67.0% of black and Hispanic teens enrolled and employed in the first year move into idleness in the next year. The effect of increasing the minimum wage by $1 increases the probability of black and Hispanic teens, enrolled and employed in the first year, moving into idleness in the second year by 33.7 percentage points.

Figure 2. Probability of Moving Into Idleness at Differing Minimum Wage Levels (Black and Hispanic Teenagers)

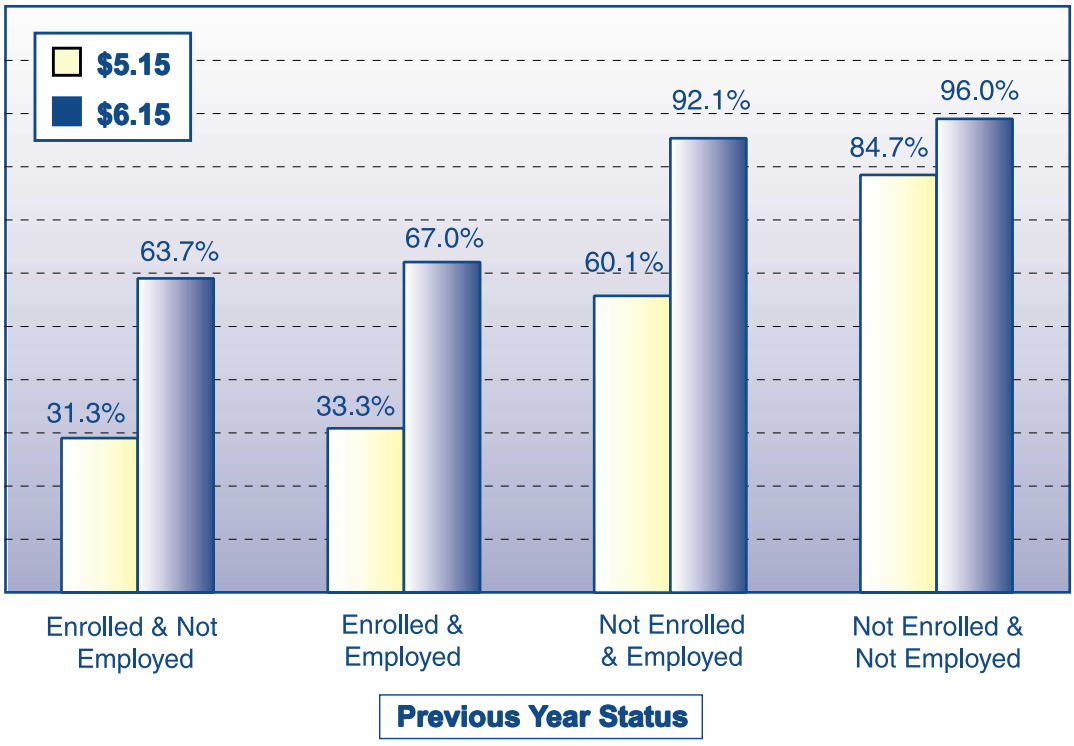


Figure 3. Change in Probability of Becoming Idle (Not Employed or Enrolled) for Black and Hispanic Teenagers Following a Wage Hike (Change in Percentage Points)

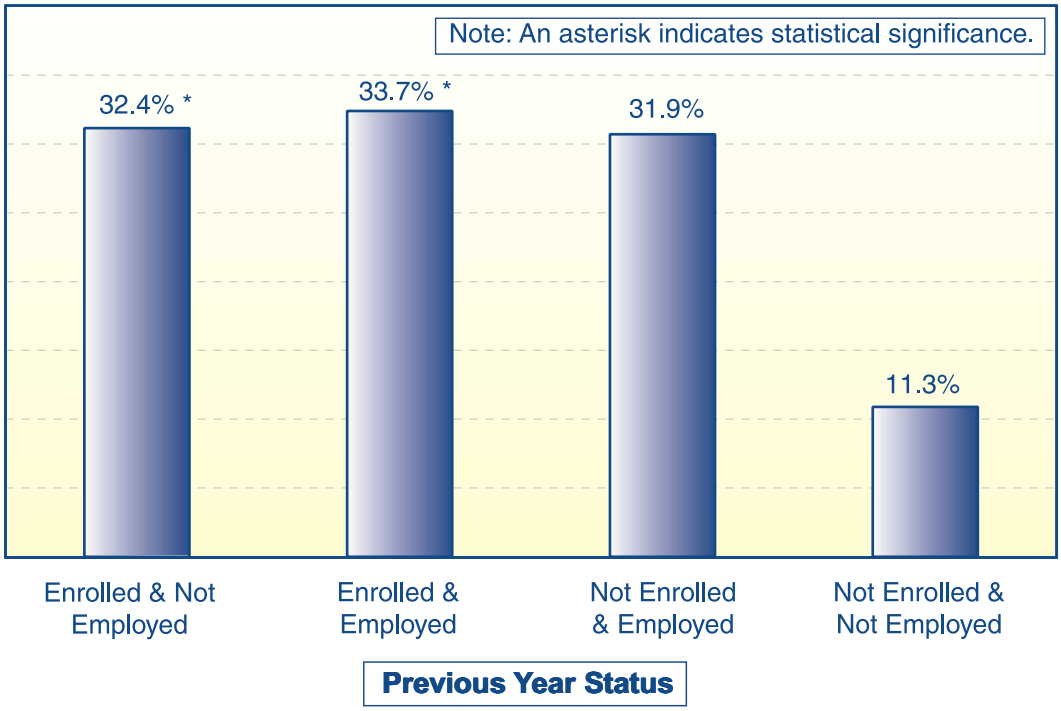


Figure 4. Probability of Moving Into Idleness at Differing Minimum Wage Levels (Non-Black and Non-Hispanic Teenagers)

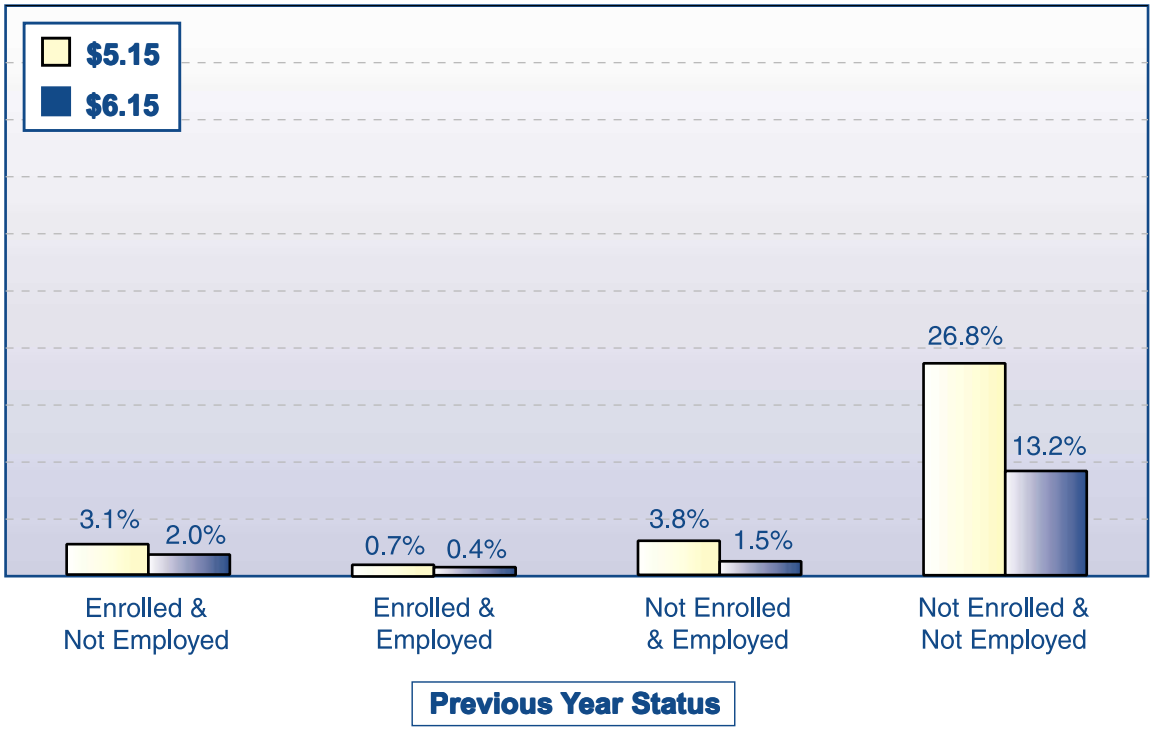


Figure 5. Change in Probability of Becoming Idle (Not Employed or Enrolled) for Non-Black and Non-Hispanic Teenagers Following a Wage Hike (Change in Percentage Points)

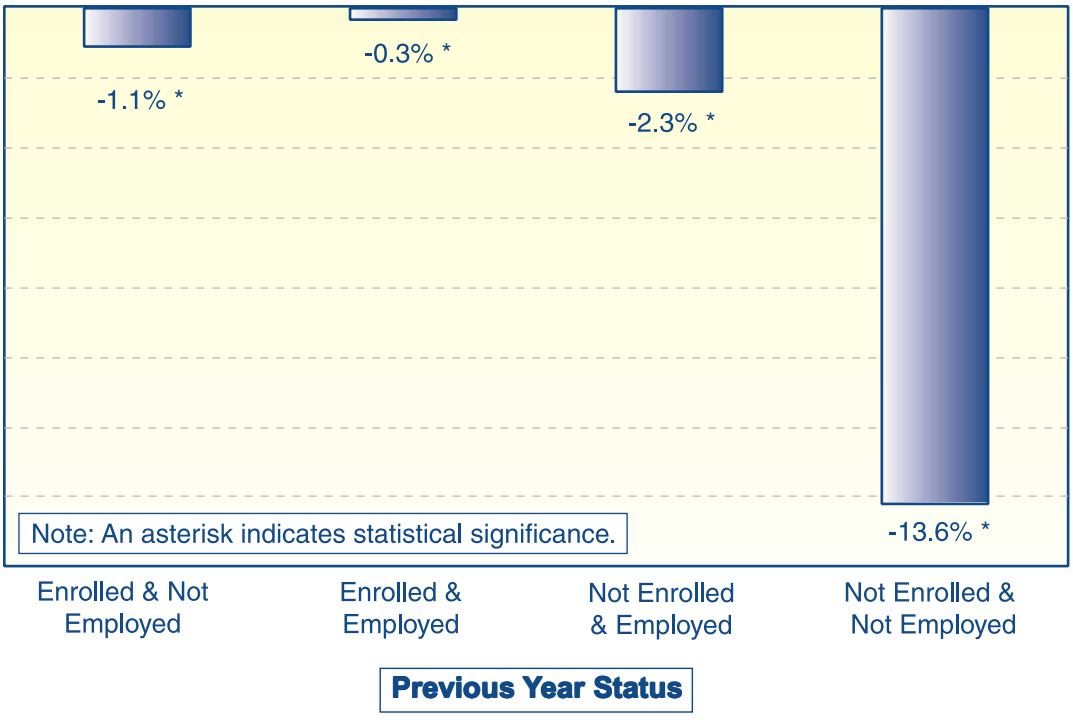


Table 1. Employment and School Enrollment Transitions Based on Minimum Wage Increases (Non-Black and Non-Hispanic)[6]

$5.15

A. YEAR 1

YEAR 2	Enrolled & Not Employed	Enrolled & Employed	Not Enrolled & Employed	Not Enrolled & Not Employed
Enrolled & Not Employed	40.5%	9.0%	1.9%	11.0%
Enrolled & Employed	35.4%	62.6%	10.2%	4.5%
Not Enrolled & Employed	21.0%	27.7%	84.2%	57.7%
Not Enrolled & Not Employed	3.1%	0.7%	3.8%	26.8%

$6.15

B. YEAR 1

YEAR 2	Enrolled & Not Employed	Enrolled & Employed	Not Enrolled & Employed	Not Enrolled & Not Employed
Enrolled & Not Employed	27.2%	5.3%	0.8%	5.5%
Enrolled & Employed	32.6%	50.3%	5.6%	3.1%
Not Enrolled & Employed	38.1%	44.0%	92.1%	78.2%
Not Enrolled & Not Employed	2.0%	0.4%	1.5%	13.2%

Difference (Increase - No Increase)

C. YEAR 1

YEAR 2	Enrolled & Not Employed	Enrolled & Employed	Not Enrolled & Employed	Not Enrolled & Not Employed
Enrolled & Not Employed	-13.3%*	-3.7%	-1.1%	-5.5%
Enrolled & Employed	-2.8%*	-12.2%	4.5%	1.4%
Not Enrolled & Employed	17.2%*	16.3%	7.9%*	20.5%*
Not Enrolled & Not Employed	-1.1%*	-0.3%	-2.3%*	-13.6%*

[6]These cross tabulations are based on both 88-89 and 91-92 panels. *Statistically significant at the 5% level. The transition percentage probabilities here are expressed in percentage terms.

Table 2. Employment and School Enrollment Transitions Based on Minimum Wage Increases (Black and Hispanic)[6]

$5.15

A. YEAR 1

YEAR 2	Enrolled & Not Employed	Enrolled & Employed	Not Enrolled & Employed	Not Enrolled & Not Employed
Enrolled & Not Employed	65.9%	59.1%	11.5%	12.4%
Enrolled & Employed	0.0%	0.0%	0.0%	0.0%
Not Enrolled & Employed	2.9%	7.6%	28.3%	2.9%
Not Enrolled & Not Employed	31.3%	33.3%	60.1%	84.7%

$6.15

B. YEAR 1

YEAR 2	Enrolled & Not Employed	Enrolled & Employed	Not Enrolled & Employed	Not Enrolled & Not Employed
Enrolled & Not Employed	35.9%	31.9%	4.7%	3.8%
Enrolled & Employed	0.0%	0.0%	0.0%	0.0%
Not Enrolled & Employed	0.4%	1.1%	3.2%	0.2%
Not Enrolled & Not Employed	63.7%	67.0%	92.1%	96.0%

Difference (Increase - No Increase)

C. YEAR 1

YEAR 2	Enrolled & Not Employed	Enrolled & Employed	Not Enrolled & Employed	Not Enrolled & Not Employed
Enrolled & Not Employed	-30.0%	-27.3%	-6.8%	-8.7%
Enrolled & Employed	0.0%	0.0%	0.0%	0.0%
Not Enrolled & Employed	-2.4%	-06.4%	-25.1%	-2.7%
Not Enrolled & Not Employed	32.4%*	33.7%*	31.9%	11.3%

[6]These cross tabulations are based on both 88-89 and 91-92 panels. *Statistically significant at the 5% level. The transition percentage probabilities here are expressed in percentage terms.

Table 3. Employment and School Enrollment Transitions Based on Minimum Wage Increases (Central City)[6]

$5.15

A. YEAR 1

YEAR 2	Enrolled & Not Employed	Enrolled & Employed	Not Enrolled & Employed	Not Enrolled & Not Employed
Enrolled & Not Employed	62.0%	33.8%	12.7%	4.9%
Enrolled & Employed	7.4%	44.3%	7.1%	0.6%
Not Enrolled & Employed	1.7%	6.9%	32.6%	1.0%
Not Enrolled & Not Employed	28.9%	15.0%	47.5%	93.5%

$6.15

B. YEAR 1

YEAR 2	Enrolled & Not Employed	Enrolled & Employed	Not Enrolled & Employed	Not Enrolled & Not Employed
Enrolled & Not Employed	57.3%	43.6%	13.8%	3.4%
Enrolled & Employed	3.1%	26.3%	3.6%	0.2%
Not Enrolled & Employed	0.3%	1.7%	6.7%	0.1%
Not Enrolled & Not Employed	9.3%	28.4%	75.9%	96.2%

Difference (Increase - No Increase)

C. YEAR 1

YEAR 2	Enrolled & Not Employed	Enrolled & Employed	Not Enrolled & Employed	Not Enrolled & Not Employed
Enrolled & Not Employed	-4.7%	9.8%	1.1%	-1.5%
Enrolled & Employed	-4.2%	-17.9%	-3.5%	-0.4%
Not Enrolled & Employed	-1.4%	-5.2%	-25.9%	-0.9%
Not Enrolled & Not Employed	10.4%	13.4%	28.4%	2.8%

[6]These cross tabulations are based on both 88-89 and 91-92 panels. *Statistically significant at the 5% level. The transition percentage probabilities here are expressed in percentage terms.

Table 4. Employment and School Enrollment Transitions Based on Minimum Wage Increases (Non-Central City)[6]

$5.15

A. YEAR 1

YEAR 2	Enrolled & Not Employed	Enrolled & Employed	Not Enrolled & Employed	Not Enrolled & Not Employed
Enrolled & Not Employed	32.6%	7.5%	1.1%	8.0%
Enrolled & Employed	28.2%	50.0%	5.9%	3.5%
Not Enrolled & Employed	37.2%	42.0%	91.5%	79.0%
Not Enrolled & Not Employed	2.0%	0.5%	1.5%	9.5%

$6.15

B. YEAR 1

YEAR 2	Enrolled & Not Employed	Enrolled & Employed	Not Enrolled & Employed	Not Enrolled & Not Employed
Enrolled & Not Employed	11.4%	2.4%	0.2%	1.7%
Enrolled & Employed	13.9%	22.3%	1.6%	1.0%
Not Enrolled & Employed	73.7%	75.2%	97.9%	94.6%
Not Enrolled & Not Employed	0.9%	0.2%	0.4%	2.6%

Difference (Increase - No Increase)

C. YEAR 1

YEAR 2	Enrolled & Not Employed	Enrolled & Employed	Not Enrolled & Employed	Not Enrolled & Not Employed
Enrolled & Not Employed	-21.2%*	-5.1%	-0.9%	-6.3%
Enrolled & Employed	-14.3%*	-27.7%	-4.3%	-2.4%
Not Enrolled & Employed	36.5%*	33.1%*	6.3%*	15.6%*
Not Enrolled & Not Employed	-1.1%*	-0.3%	-1.1%*	-6.8%*

[6]These cross tabulations are based on both 88-89 and 91-92 panels. *Statistically significant at the 5% level. The transition percentage probabilities here are expressed in percentage terms.

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