The Role of Occupational Composition in State Wage Differentials

Patrick Kilcoyne

It is commonly understood that people in some States have higher average wages than do those in other States. However, it is not always the case that moving from a State with a low average wage to one with a higher average wage will make a person better off economically, even if his or her salary increases. The cause of these interstate differences is multifaceted, and includes such factors as cost of living, industry, education level, and occupations.

One possible source of State wage differences is the occupational composition of the State's workforce. Some occupations pay higher wages than others do. If a State has an employment mix that has a greater-than-typical share of workers in high paying occupations, the State's average wage will be relatively high, all other factors being held constant. This article investigates the role of occupational composition of the State workforce in explaining differences in the average State wage, and asks to what extent State average wage differences are caused by the occupational composition or by generally higher State occupational wage rates. State occupational employment staffing patterns are examined to see how the staffing patterns affect the overall average wage rates.

Finally, we examine whether there is a correlation between the occupational composition and the wage premiums found in different States. That is, we examine whether increasing concentrations of employment in high-paid occupations increases averages wage rates for workers in all occupations.

The Occupational Employment Statistics (OES) survey produces estimates of wages for 770 detailed occupations and 22 major occupational groups from the Standard Occupational Classification (SOC) system for each State, for metropolitan areas, and for the Nation as a whole. In addition, OES generates statewide and nationwide estimates of average wages across all occupations and industries. According to the May 2003 OES survey, the national average annual wage was \$36,210¹. The States with the lowest average annual wages were Mississippi, with an average of \$27,310, and South Dakota, with an average wage of \$27,620. The District of Columbia had the highest wage, with an average of \$54,040.

Patrick Kilcoyne is an economist in the Division of Occupational and Administrative Statistics, Bureau of Labor Statistics.

The wage differential for an individual worker depends not only on the cost of living in the State, but also on the worker's skills and experience, and most importantly, his or her occupation. To see the impact that the occupational composition of each State has on the differential between the State and national average wage, the effect of the occupational component needs to be separated from the other factors.

Methodology

The average wage of each State, as computed by the OES survey, is the employment-weighted average of all of the occupational wage estimates in the State. The "staffing pattern" of a State is the distribution of the State's total employment across each occupation or occupational group, expressed as a percentage of State employment. If a State were to have the same occupational staffing pattern as the Nation as a whole, along with identical occupational wages, then the State average wage would equal the national average wage. If a State had the same occupational wage rates as the Nation, but a staffing pattern that was more concentrated in higher (or lower) paying occupations, the overall State average wage would increase (or decrease).

The comparison of cross-sectional quantitative data by separating the factors causing the differentials is known as "shift-share analysis." While shift-share analysis is often used to isolate factors contributing to changes over time, it is used here to isolate factors contributing to differences by area.

In order to isolate the effect of the State occupational staffing pattern on the overall State wage, the national wage was substituted for the State wage for every occupation. This produced the average wage for the State using the State's own staffing pattern and national wages. Inversely, to determine the effect of a State's occupational wage rates on the overall State wage, the national occupational staffing pattern must be substituted for the State staffing pattern. This was done by replacing the State occupational employment estimate with a proportional employment level using the national staffing pattern and the State's total employment. This procedure results in an average State wage based on a national staffing pattern with State wages, and demonstrates

the effect of the wage rate level on the average wage for each State. (This does not imply that the wage rate component of the wage differential can be strictly defined as a regional cost of living factor or a State wage premium. It is simply the nonoccupational component of the State average wage, but will be referred to in this article as the "wage component.")

The overall wage differential for each State can be viewed as being made up of a wage component, an occupational component, and a residual effect. The overall State wage differential is obtained by subtracting the national average annual wage from the State average wage. The wage and occupational factors are obtained by summing the employment and weighted average wage estimates for all of the 770 OES occupations, as well as the 22 SOC major groups. The wage component is derived by substituting a "converted occupational employment" estimate for the State occupational employment, based on the national staffing pattern but using State occupational wages. The occupational component is derived by substituting national occupational wages for State occupational wages, but using the State occupational employment. To obtain these values, the national and State staffing patterns and wage rates were used in the expression below:

Results

Text table 1 presents the results of the shift-share analysis of State average wages using detailed occupational staffing patterns. The 50 States plus the District of Columbia are listed in alphabetical order, along with the average annual State wage rate, the difference from the national rate, and the amount of the difference due to the wage component and the amount due to occupational composition, as well the residual factor that is due to differences in each of the first two

This table shows that the wage difference in most States is due mainly to the State's occupational wage rates generally, rather than the occupational composition of the State. In fact, for all of the States, the average share of the wage difference due strictly to the wage component is 72.5 percent. Nevertheless, 32.6 percent of the difference in State average wage rates *is* due to the occupational composition of the States (-5.1 percent of the difference is due to the

residual factor). In some States such as Maryland and Wisconsin, the amount of the difference due to occupational composition is larger than the difference due to wages. In other States, such as Georgia and Michigan, the occupational component and the wage component have opposite signs. The combination of the two effects together is relatively small.

Text table 2 displays the percentage of State employment in each of the 22 SOC major occupational groups, as well as the national mean wage for the occupational group. This gives an indication of each State's "staffing pattern effect" on the average State wage. Many States have similar staffing patterns, and the occupational employment shares reflect this. Office and administrative support occupations have the highest share of employment in every State, with an average of 17.4 percent and all but four States having a share between 16 and 20 percent. Although the employment shares in most categories are fairly similar, there can be large variations among the States in certain occupational groups. For example, production occupation employment shares range from a high of 14.2 percent in Arkansas to a low of 1.5 percent in the District of Columbia. Because the SOC major groups vary considerably in terms of national average wages, differences in employment distributions among the occupational groups result in differences in overall average wages.

The SOC major groups with the highest national average annual wages are management occupations (\$82,790); legal occupations (\$78,910); and computer and mathematical occupations (\$63,240). The District of Columbia has the highest percentage employment for all three of these occupational groups, and also the highest average wage at \$54,040. The SOC major groups (other than the smallest group of farming, fishing, and forestry) with the lowest national average wages are food preparation and serving related occupations (\$17,290); building and grounds cleaning and maintenance occupations (\$21,380). Hawaii and Nevada are the States with the two highest percentages of employment for all three of these groups, presumably because of the dominance of the tourism industry.

Because both of these States have relatively high concentrations of workers in low-paying occupational groups,

```
State Wage
                                            Occupational
                  Wage
Differential
                  Component
                                            Component
                                                                        Residual
SAW - NAW =
                \sum (COE*SOW) - NAW
                                           \sum (SOE*NOW) - NAW
                                                                   + \Sigma[(NOP-SOP)*(NOW-SOW)]
                                                STE
SAW
         = OES State average annual wage, May 2003
NAW
         = OES national average annual wage, May 2003 ($36,210)
SOF
         = OES State occupational employment, May 2003
NOE
         = OES national occupational employment, May 2003
SOW
         = OES State occupational wage, May 2003
NOW
         = OES national occupational wage, May 2003
STE
         = OES State total employment, May 2003
         = OES national total employment, May 2003 (127,567,910)
NTF
NOP
         = National occupational percentage
                                           = (NOE/NTE)
SOP
         = State occupational percentage
                                            = (SOE/STE)
COE
         = Converted occupational employment = (NOE/NTE)*STE
```

we expect to see a negative influence of the staffing pattern on overall State wages. Consequently, text table 1 shows that the occupational component in Hawaii indicates a wage rate \$1,611 below the national average and the occupational component indicates that the wage in Nevada is \$3,662 below the national average. Hawaii has an average annual wage that is below the national average at \$35,660, but its wage component is actually \$617 above the national average. Similarly, Nevada has an average wage that is \$2,450 less than the Nation's, but its wage component is \$741 above the national average. The positive wage component indicates that, on average, workers in a given occupation in Nevada and Hawaii earn more than their counterparts in other States. It is the occupational mix of workers in these States that cause average wages to be below the national average.

The results in text table 1 show staffing pattern effects and wage effects using detailed occupational staffing patterns. A similar calculation was done using staffing patterns at the major occupational group level. As expected, the staffing pattern effects in the calculation using the detailed occupation staffing patterns were more pronounced. This is due to the variability in the wage rates at the major group level caused by differences in the detailed occupational composition with the major group. This demonstrates that disaggregating the detailed occupations and the skill levels implicit in the occupations from their major group provides further evidence of State wage differentials due to differences in the skills used by the workers in each State.

An examination of States with notably high and low wages reveals that the concentration of certain detailed occupations does have a large effect on the overall State wage. For example Alaska's average wage is \$4,370 higher than the national average. Alaska employs 990 petroleum pump system operators, refinery operators, and gaugers (SOC 51-8093). As a share of employment, there are 10 times as many of these workers in Alaska than in the Nation as a whole. Furthermore, the State average wage for this occupation, \$67,260, was roughly \$20,000 per year higher than the national average. Conversely, in West Virginia there were 760 fallers (that is, timber cutters, SOC 45-4021), who accounted for a share of the State's employment that was approximately 15 times their national employment share. The State's average wage for this occupation is \$21,320, \$10,530 less than the national average for the occupation. The overall State average wage for West Virginia was \$29,540, or \$6,670 less than the national average wage. These examples demonstrate that the predominance of detailed occupations in particular States can contribute significantly to both wage and staffing pattern effects on the State average wage.

Correlations between staffing pattern effects and wage effects

In the previous section, we saw that there are some States with both positive wage effects and positive staffing pattern effects, some States with negative effects for both compo-

nents, and some with effects of the opposite sign. We might expect a relationship between the occupational component and the wage component if wages of other workers are affected by general wage levels in the area. For example, we might expect food service workers or personal service workers in areas with high concentrations of doctors, lawyers, and engineers to be paid more than their counterparts in other areas. This relationship would be demonstrated by a positive correlation between the staffing pattern effects and the wage effects. The correlation coefficient (a number between +1 and -1, representing a positive or negative relationship) between these two columns in text table 1 is +.49.

In general, the staffing pattern effects and the wage rate effects shown in the table have the same sign. Of the 51 areas listed, 39 had effects of the same sign. Five had negative staffing pattern effects, but positive wage effects: Hawaii, Nevada, Michigan, and Rhode Island. Seven States had positive staffing pattern effects but negative wage effects: Arizona, Texas, Virginia, Idaho, and Georgia. In the latter seven States, the occupational staffing patterns suggest that the wages for these States should be higher than average but, in all except Virginia, the average wage is lower. The very low occupational wage rates in the other six States more than compensate for the high employment effects, and the overall State wages are below the national average.

Conclusion

Despite the fact that State wage differentials are caused primarily by State wage levels and other nonoccupational factors, the size of the wage differential caused by occupation is significant and varies greatly from State to State. In Virginia, the difference due to the occupational component is \$1,275 or 177 percent of the total wage differential of \$720, and the wage component is -\$644. In the state of Maryland, 75.7 percent of the wage difference is attributable to the occupational component, even though the average share for all States from this component is only 32.6 percent.

At the level of major occupational groups, the share of the State wage differential due to the wage component increases slightly from 72.5 percent to 78 percent. Because many of the States that have average wages below the national level are rural States, the wage component may reflect a lower cost of living or other regional factors. In relation to this, States with high wage components and high occupational components may have higher housing or consumer costs, but they may also be home to industries and companies that employ high percentages of professional or technical workers and pay the higher wages that these workers can command. In States where the wage component is high but the occupational component is low or negative, it is possible that employers are competing for scarce workers by paying them wages above what they would earn in other areas.

¹Hourly wages are converted to their full-time equivalent annual wage rate by multiplying the hourly wage by 2,080, or 40 hours per week times 52 weeks per year.

Text table 1. State average wages and the composition of differences, May 2003

State	State average annual wage	Difference from national average	Difference due to wage rates	Difference due to occupations	Difference due to residual		
Alabama	\$31,330	-\$4,880	-\$3,924	-\$1,110	\$154		
Alaska	\$40,580	\$4,370	\$2,606		\$447		
				\$1,315			
Arizona	\$33,570	-\$2,640	-\$2,520	\$68	-\$196		
Arkansas	\$28,530	-\$7,680	-\$6,093	-\$2,287	\$700		
California	\$40,640	\$4,430	\$4,182	\$265	-\$23		
	A00.470	40.000	A		0.110		
Colorado	\$38,470	\$2,260	\$1,025	\$1,114	\$118		
Connecticut	\$42,970	\$6,760	\$5,383	\$1,176	\$195		
Delaware	\$37,520	\$1,310	\$728	\$787	-\$211		
District of Columbia	\$54.040	\$17,830	\$3,253	\$12,083	\$2,492		
lorida	\$32,540	-\$3,670	-\$2,380	-\$1,363	\$69		
	#04.000	#4.000	04.504	0450	#00		
Georgia	\$34,880	-\$1,330	-\$1,561	\$150	\$82		
ławaii	\$35,660	-\$550	\$617	-\$1,611	\$436		
daho	\$31,550	-\$4,660	-\$4,941	\$158	\$115		
Ilinois	\$37,340	\$1,130	\$39	\$1,288	-\$205		
ndiana	\$33,070	-\$3,140	-\$2,221	-\$1,564	\$638		
	A 0				_		
owa	\$30,950	-\$5,260	-\$4,091	-\$1,698	\$521		
Kansas	\$32,960	-\$3,250	-\$3,074	-\$395	\$219		
Centucky	\$31,510	-\$4,700	-\$3,890	-\$1,276	\$467		
ouisiana	\$30,410	-\$5,800	-\$5,238	-\$668	\$98		
Maine	\$32,370	-\$3,840	-\$3,592	-\$487	\$232		
Anndond	#20.000	¢0.450	0040	\$0.64E	ΦA A		
Maryland	\$39,660	\$3,450	\$816	\$2,615	\$14		
Massachusetts	\$42,830	\$6,620	\$3,983	\$2,552	\$85		
/lichigan	\$38,110	\$1,900	\$1,831	-\$265	\$335		
//innesota	\$38,140	\$1,930	\$1,752	\$313	-\$139		
Mississippi	\$27,310	-\$8,900	-\$7,128	-\$2,569	\$795		
Alexandria (#00 770	(0.440	#C 222	0054	^		
Missouri	\$33,770	-\$2,440	-\$2,308	-\$254	\$114		
Montana	\$28,980	-\$7,230	-\$6,492	-\$841	\$103		
Nebraska	\$31,680	-\$4,530	-\$3,939	-\$864	\$270		
Nevada	\$33,760	-\$2,450	\$741	-\$3,662	\$471		
New Hampshire	\$35,750	-\$460	-\$1,087	\$487	\$138		
				·	·		
lew Jersey	\$41,020	\$4,810	\$4,651	\$258	-\$97		
lew Mexico	\$31,760	-\$4,450	-\$4,695	-\$77	\$315		
New York	\$42,270	\$6,060	\$4,873	\$869	\$313		
North Carolina	\$33,270	-\$2,940	-\$2,293	-\$786	\$131		
North Dakota	\$29,380	-\$6,830	-\$5,412	-\$1,797	\$378		
					·		
Ohio	\$34,870	-\$1,340	-\$970	-\$522	\$152		
Oklahoma	\$30,310	-\$5,900	-\$5,651	-\$379	\$126		
Dregon	\$35,550	-\$660	\$191	-\$724	-\$131		
Pennsylvania	\$35,060	-\$1,150	-\$1,325	\$229	-\$53		
Rhode Island	\$37,120	\$910	\$1,124	-\$369	\$149		
	A 04.405	45.050			A 40-		
South Carolina	\$31,160	-\$5,050	-\$4,475	-\$1,070	\$489		
South Dakota	\$27,620	-\$8,590	-\$6,282	-\$3,112	\$797		
ennessee	\$31,910	-\$4,300	-\$3,591	-\$975	\$267		
exas	\$34,260	-\$1,950	-\$2,143	\$195	-\$5		
Itah	\$33,020	-\$3,190	-\$3,059	-\$274	\$140		
ermont	\$33,500	-\$2,710	-\$1,456	-\$1,265	\$11		
/irginia	\$36,930	\$720	-\$644	\$1,275	\$90		
Vashington	\$39,600	\$3,390	\$3,549	\$98	-\$261		
Vest Virginia	\$29,540	-\$6,670	-\$5,966	-\$1,146	\$440		
Visconsin	\$33,980	-\$2,230	-\$3,966 -\$883	-\$1,621	\$269		
VISCOIISIII	φυ 3,30 0	-φ∠,∠3U	- - \$000	-φι,υ∠ι	ΦZUS		
		i .	-\$5,332	-\$890			

Text table 2. State percentage of employment by SOC major group, May 2003

State	Manage- ment (\$82,790)	Busi- ness and financial opera- tions (\$55,550)	Computer and mathematical (\$63,240)	Architecture and engineering (\$59,230)	Life, physical, and social science (\$53,210)	Com- munity and social services (\$35,420)	Legal (\$78,910)	Educa- tion, training, and library (\$40,660)	Arts, design, entertain- ment, sports, and media (\$42,620)	Health- care practi- tioners and technical (\$55,380)	Health- care support (\$22,750)
Alabama	5.1	3.0	1.6	1.9	0.6	0.8	0.5	5.5	0.8	5.4	2.3
Alaska	7.3	3.0	1.1	2.2	2.2	2.0	0.9	7.0	1.0	4.2	1.9
Arizona	5.4	4.0	2.0	2.4	0.7	1.1	0.7	5.8	1.0	4.2	2.4
Arkansas California	4.2 5.4	3.0 4.4	1.2 2.7	1.0 2.2	0.6 1.0	1.2 1.2	0.5 0.8	5.7 6.2	0.7 1.5	5.3 3.9	2.4 2.1
Colorado	5.2	4.5	3.6	2.5	1.2	1.1	0.7	5.6	1.5	4.1	2.0
Connecticut	5.2	4.9	2.7	2.3	1.1	1.9	0.8	7.2	1.3	5.2	3.0
Delaware	6.6	4.5	2.4	1.2	1.6	1.6	0.9	5.2	0.7	4.7	2.0
District of Columbia	11.1	10.4	4.8	2.1	3.0	1.3	5.8	4.4	3.0	4.4	1.2
Florida	3.9	3.7	1.9	1.6	0.6	1.2	0.9	4.8	1.2	5.0	2.4
Georgia	5.9	3.6	2.6	1.4	0.6	0.9	0.7	6.3	0.9	4.3	2.0
Hawaii	4.5 6.5	3.6 3.0	1.3 1.6	1.5 2.3	1.2 1.7	1.6 1.4	0.8 0.6	6.5 5.9	1.7	4.1 4.8	2.3 2.6
Illinois	6.8	4.3	2.2	1.6	0.7	1.4	0.6	5.9 6.4	1.1	4.8	2.0
Indiana	4.5	3.1	1.3	1.8	0.7	1.0	0.7	5.4	0.9	5.1	2.2
lowa	4.6	3.7	1.5	1.3	0.7	1.5	0.5	6.1	1.1	4.7	2.7
Kansas	4.7	3.6	2.1	2.0	0.7	1.1	0.6	6.4	1.1	4.9	3.0
Kentucky	5.0	2.7	1.4	1.3	0.5	1.2	0.6	5.9	0.8	5.5	2.7
Louisiana	5.8	2.7	0.9	1.6	0.7	1.3	0.7	5.9	0.8	5.7	2.8
Maine	5.8	3.1	1.2	1.5	0.7	2.1	0.6	7.5	1.0	5.6	3.3
Maryland	7.6 7.3	4.3 4.1	3.8 3.3	2.1 2.3	1.4 1.4	1.5 1.7	0.9 0.9	6.4 6.5	1.2 1.3	5.0 5.7	2.2 2.7
Michigan	3.9	4.3	1.8	3.1	0.9	0.9	0.9	5.7	1.2	5.0	2.7
Minnesota	4.7	5.1	2.6	2.0	1.0	1.7	0.7	5.9	1.2	5.2	2.7
Mississippi	4.7	2.2	0.8	1.3	0.6	0.8	0.6	6.1	0.7	5.5	2.5
Missouri	5.4	3.6	2.1	1.3	0.6	1.1	0.7	5.6	1.3	5.5	2.8
Montana	6.2	2.8	1.2	1.4	1.6	1.7	0.7	6.7	1.3	5.0	2.8
Nebraska	4.7	3.6	2.2	1.3	0.9	1.5	0.4	5.9	1.2	5.1	2.9
New Hampshire	4.1 6.2	2.8 3.6	1.0 2.0	1.3 2.1	0.6 0.7	0.6 1.2	0.6 0.5	3.8 7.1	1.1 0.9	3.5 4.9	1.5 2.2
New Jersey	4.8	4.4	3.0	1.5	1.0	1.4	0.7	6.3	1.0	4.5	2.6
New Mexico	6.0	3.2	1.7	2.7	1.4	1.4	0.7	6.6	0.9	4.8	2.6
New York	4.6	4.0	2.1	1.4	0.8	1.8	1.2	8.0	2.0	5.2	3.4
North Carolina	5.1	3.0	2.0	1.4	1.0	1.2	0.5	6.3	0.8	4.9	2.7
North Dakota	5.4	2.7	1.4	1.3	0.9	1.5	0.5	6.4	1.1	5.6	3.2
Ohio	4.6	3.9	1.8	1.8	0.6	1.1	0.6	5.4	1.1	5.3	2.9
Oklahoma	5.5	3.3	1.5	1.5	0.8	1.3	0.6	6.7	0.9	5.3	3.1
Oregon	4.8	3.8	2.1	2.1	1.3	1.9	0.6	6.3	1.3	4.4	2.4
PennsylvaniaRhode Island	6.0 4.2	3.6 3.9	1.9 2.2	1.6 1.7	0.8 1.0	1.5 2.1	0.8 0.9	5.7 7.1	0.9 1.2	5.7 6.0	2.7 3.4
							0.7				
South CarolinaSouth Dakota	6.0 3.4	2.8 2.9	1.2 1.4	1.9 1.0	0.6 0.6	1.2 1.2	0.7	5.6 6.2	0.9 1.3	4.9 5.5	2.4 2.9
Tennessee	6.1	3.0	1.4	1.4	0.5	1.0	0.4	5.1	1.0	5.4	2.9
Texas	5.5	3.5	2.2	2.1	0.8	0.8	0.7	6.9	1.0	4.4	2.4
Utah	5.3	3.4	2.5	1.9	1.1	1.4	0.6	5.7	1.3	4.0	2.0
Vermont	2.8	3.5	1.8	2.2	1.1	2.4	0.6	9.0	1.5	5.4	2.5
Virginia	4.8	5.0	4.3	2.1	1.0	1.1	0.9	6.1	1.2	4.3	2.0
Washington	3.3	4.7	3.3	2.7	1.4	1.7	0.8	6.3	1.5	4.8	2.6
West Virginia Wisconsin	5.1 4.1	2.5 3.4	1.1 1.7	1.4 1.8	1.0 0.9	1.5 1.2	0.8 0.5	5.6 5.5	0.9 1.2	6.5 4.7	3.1 3.0
Wyoming	5.4	2.4	0.8	1.5	1.5	1.4	0.7	6.5	0.9	4.4	2.2

Text table 2. State percentage of employment by SOC major group, May 2003—Continued

State	Protective service (\$34,090)	Food prepara- tion and serving related (\$17,290)	cleaning and main-	Personal care and service (\$21,380)		Office and admini- strative support (\$28,260)	Farming, fishing, and forestry (\$20,200)	Con- struction and extrac- tion (\$36,650)	Installa- tion, main- tenance, and repair (\$36,210)	Produc- tion (\$28,710)	Transportation and material moving (\$27,600)
Alabama	2.2	7.5	3.0	1.6	10.9	16.3	0.4	5.1	5.2	11.4	8.9
Alaska	3.8	7.7	3.3	2.7	8.4	17.5	0.2	6.9	5.3	3.6	7.8
Arizona	2.7	8.8	3.7	2.3	11.1	17.7	0.6	7.2	4.4	5.4	6.5
Arkansas	1.9	7.6	3.0	1.6	10.1	16.0	0.6	4.3	4.8	14.2	9.9
California	2.5	7.8	3.2	2.1	10.3	18.6	1.2	4.9	3.5	7.4	7.0
Colorado	2.1	8.8	3.4	2.4	11.8	17.9	0.2	6.0	4.1	5.2	6.3
Connecticut	2.3	6.9	3.6	2.7	11.0	18.4	0.1	3.4	3.3	7.3	5.5
Delaware	1.9	7.4	3.7	2.0	10.8	21.2	0.2	4.8	4.3	6.5	5.7
District of Columbia	3.9	6.4	3.9	1.4	4.7	20.8	0.0	2.0	1.4	1.5	2.5
Florida	2.9	8.5	3.9	2.7	12.1	19.6	0.7	5.6	4.0	5.4	7.6
Georgia	2.4	7.8	3.0	1.9	11.0	17.6	0.3	4.3	4.6	9.2	8.6
Hawaii	3.8	12.2	5.9	3.4	10.5	16.7	0.2	4.5	3.9	3.4	6.5
Idaho	1.9	8.2	3.5	1.6	10.3	16.6	1.0	5.8	4.6	7.2	7.8
Illinois	2.4	7.2	3.2	2.1	10.2	17.9	0.1	4.2	3.7	9.0	8.3
Indiana	1.9	8.7	3.1	1.9	9.8	16.0	0.2	4.8	4.5	13.9	8.7
lowa	1.5	8.5	3.2	2.3	10.6	17.0	0.4	4.3	4.3	11.3	8.2
Kansas	1.8	8.0	3.2	2.4	10.5	17.3	0.4	4.9	4.6	9.6	7.2
Kentucky	1.9	8.2	3.1	1.8	10.0	16.7	0.2	5.0	4.5	11.5	9.1
Louisiana	3.0	8.9	3.3	2.6	10.1	16.4	0.4	6.4	5.0	6.8	7.8
Maine	1.8	8.9	3.6	2.2	10.6	16.2	0.4	5.1	4.4	7.6	7.0
					40.0		٠.			١	
Maryland	2.7	7.8	3.4	2.2	10.0	17.6	0.1	5.5	3.9	4.4	6.1
Massachusetts	2.4	7.9	3.4	2.3	10.1	17.7	0.1	3.8	3.4	6.4	5.3
Michigan	1.8	8.3	3.2	2.2	10.9	16.0	0.2	4.3	4.1	11.9	7.1
Minnesota	1.8 2.8	8.0 8.3	3.1 3.2	2.7 2.3	11.2 10.2	17.0 16.1	0.2 0.5	4.4 4.9	3.6 4.6	8.9 12.1	6.4 9.2
Mississippi	2.0	0.3	3.2	2.3	10.2	10.1	0.5	4.9	4.0	12.1	9.2
Missouri	2.1	8.7	3.4	2.4	10.5	17.8	0.2	4.7	4.0	8.9	7.4
Montana	1.8	10.6	4.1	2.6	10.7	16.4	0.6	6.0	4.8	4.4	6.7
Nebraska	1.6	8.1	3.2	1.8	10.6	18.1	0.5	4.7	4.2	9.3	8.1
Nevada	2.9	12.5	5.7	6.3	11.3	16.6	0.1	7.7	4.1	3.7	8.1
New Hampshire	1.8	8.6	3.2	2.4	13.0	16.7	0.1	4.0	4.1	8.9	5.6
New Jersey	2.8	6.5	3.5	2.9	11.3	20.0	0.1	3.7	3.7	5.9	8.4
New Mexico	3.1	9.6	3.9	2.5	10.3	16.3	0.6	6.7	4.3	4.3	6.3
New York	3.0	6.5	3.5	3.1	10.4	19.9	0.1	3.8	3.7	5.7	5.6
North Carolina	2.0	7.8	3.1	2.0	10.5	16.5	0.2	4.6	4.6	11.7	8.1
North Dakota	1.2	9.5	3.7	3.4	11.2	17.1	0.3	5.0	4.6	6.2	7.7
Ohio	0.4		2.4		10.4	17.4	0.4	4.4	4.0	110	
Ohio	2.1	8.5	3.1	2.0	10.1	17.1	0.1	4.1	4.2	11.3	8.3
Oklahoma	2.2	8.5	3.1	1.7	10.5	17.9	0.2	5.1	4.7	8.6	6.9
Oregon	1.9 2.1	8.5 7.7	3.1 3.2	2.0 2.3	10.4 10.5	17.8 18.1	0.7 0.1	4.5 4.2	4.0 4.1	8.3 8.8	8.0 7.6
Pennsylvania Rhode Island	2.1	9.0	3.2 3.2	2.3	9.5	18.1	0.1	3.9	3.5	9.0	7.6 5.8
Tallodo Island	2.3	3.0	J.2	2.5	9.0	17.0	0.1	5.9	5.5	9.0	3.0
South Carolina	2.1	8.6	3.7	1.9	10.1	15.4	0.4	4.8	4.9	11.9	8.0
South Dakota	1.4	10.1	4.2	2.9	11.7	17.8	0.3	5.3	4.0	7.9	7.5
Tennessee	2.2	8.0	3.2	1.7	9.8	16.8	0.2	4.1	4.2	11.9	10.1
Texas	2.5	8.1	3.2	2.7	10.9	17.8	0.2	5.4	4.5	7.2	7.1
Utah	2.1	7.5	3.3	1.9	11.8	18.6	0.2	6.2	4.3	7.9	7.0
Vermont	1.2	8.3	3.5	2.6	10.3	17.6	0.3	5.2	4.0	8.5	5.6
Virginia	2.4	7.5	3.6	2.1	11.1	16.7	0.2	5.5	4.5	6.7	6.9
Washington	2.0	8.4	2.8	2.4	11.2	17.2	0.5	5.1	4.2	5.8	7.4
West Virginia	2.0	8.7	3.3	2.2	10.6	16.6	0.4	6.1	5.0	7.0	8.7
9	1.7	8.3	3.4	2.4	9.7	16.9	0.1	4.5	3.8	12.9	8.1
Wisconsin											
Wyoming	2.3	9.9	4.3	2.3	9.4	14.0	0.2	9.4	6.0	5.3	9.2