

October 2017

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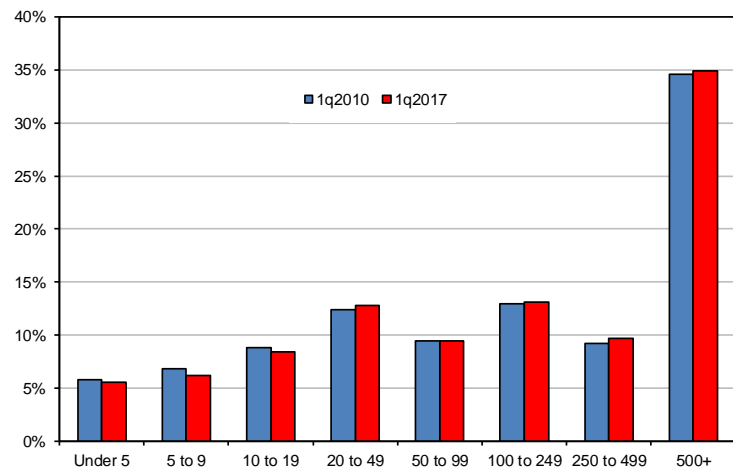
First Quarter 2017: What Do Changes in the Distribution of Jobs by Employer Size Class Reveal?

Oregon employers must report total wages and hours worked for each employee covered by unemployment insurance. These quarterly records cover nearly 1.9 million individuals employed in the state but don't include roughly 200,000 self-employed workers. Past quarterly wage reports are available in the Oregonians @ Work box at www.qualityinfo.org/pubs.

Between the first quarter of 2010 recessionary trough and the first quarter of 2017, more than 357,000 jobs were added to the Oregon economy, an increase of 21.5 percent. Did these new jobs change the distribution of all jobs by employer size class? Was there uniformity in the changes in median hourly wage across size classes?

A side-by-side comparison of the percent of jobs in each of eight employer size classes in the first quarters of 2010 and 2017 suggests that the larger size classes have been disproportionately favored in gaining jobs over the time period. Is this a reasonable interpretation? What might we see during a period of economic growth? If the rate of hiring (i.e., percent increase in number of jobs) were roughly the same for small employers as for large employers, we could expect to see an increase in the share of jobs with large employers. In fact, the increase in the individual share for any employer would be proportional to its size. When jobs are added to employers in a specific size class, they may also bump the employer into a larger size class. For example, two jobs added to an employer with 18 employees moves the employer from the 10-19 to the 20-49 employees size class. (Conversely, when employers shed jobs, they may move into smaller size classes.) Even large changes over time in the size of individual employers may not show up in comparisons by size class. Generally, simple longitudinal studies of the distribution of jobs by

**Share of Oregon Jobs by Employer Size Class
 First Quarter 2010 and First Quarter 2017**



Source: Oregon Unemployment Insurance wage records

employer size class will obscure most of the underlying dynamics of job and employer growth or decline. To observe and understand these, a closer examination of the behavior of individual employers would be required.

Hourly Wages

Across all employer size classes, the median nominal hourly wage increased over the span of seven years. However, the real, or inflation-adjusted hourly wage actually shrank during that time period – from \$19.69 to \$19.04. As the table shows, the median hourly wage decreased for all employer size classes. Why might this have occurred? It may seem surprising, especially in light of recent increases in the minimum wage. One possible answer might be supported by the change in the share of jobs by hourly wage category. For all employer size classes the percent of jobs in the \$10.00-\$19.99 category increased between the first quarters of 2010 and 2017, while the percent of jobs in the aggregated \$20.00-\$59.99 category decreased.

**Share of Jobs in Wage Category, by Employer Size Class
First Quarter 2010 and First Quarter 2017**

	<u>\$10.00 - \$19.99</u>		<u>\$20.00 - \$59.99</u>		<u>Median Wage</u>	
	<u>1q2010*</u>	<u>1q2017</u>	<u>1q2010*</u>	<u>1q2017</u>	<u>1q2010*</u>	<u>1q2017</u>
Total - All Size Classes	43.2%	46.0%	42.1%	39.9%	\$19.69	\$19.04
Under 5 employees	48.6%	51.6%	36.9%	35.1%	\$17.94	\$17.67
5 - 9 employees	50.2%	53.1%	35.1%	33.8%	\$17.09	\$16.83
10 - 19 employees	49.4%	53.0%	34.6%	33.5%	\$16.82	\$16.64
20 - 49 employees	47.5%	51.2%	37.2%	35.3%	\$17.59	\$17.18
50 - 99 employees	45.7%	49.0%	40.7%	38.7%	\$18.75	\$18.22
100 - 249 employees	45.7%	47.7%	40.4%	38.8%	\$18.72	\$18.37
250 - 499 employees	43.4%	45.8%	41.1%	39.0%	\$19.04	\$18.37
500 or more employees	36.2%	38.9%	49.4%	45.8%	\$23.52	\$22.77

* Inflation-adjusted to 2017

Source: Oregon Employment Department Unemployment Insurance wage records

A reasonable explanation for this could be as follows: During the recession, employers preferentially laid off less experienced workers holding more recently created (and likely, lower paying) jobs. This would have had the effect of raising the real median wage. During the subsequent period of recovery, as Oregon added 357,000 jobs, previously terminated employees and new workers were hired, many presumably at a lower starting wage. The effect of this would be to shift the balance between the percent of jobs in the higher and lower hourly wage categories and lower the real median wage.

Data

As measured by the Unemployment Insurance wage records, the number of jobs in a quarter is always larger than the number of workers. An employer's job count is not a point-in-time count of workers; but rather the total number of all employees who worked for the employer in a specific quarter. The greater the amount of turnover (e.g., employees coming and going), the more the number of jobs will exceed a point-in-time count of employees.

Table 1: Oregon - Number of Jobs by Hourly Wage Level and Broad Industry - 1st Quarter 2017*

	Under \$10.00	\$10.00 - \$14.99	\$15.00 - \$19.99	\$20.00 - \$29.99	\$30.00 - \$39.99	\$40.00 - \$49.99	\$50.00 - \$59.99	\$60.00 or more	Total	Median Wage
Total - All Industries	135,139	567,432	360,465	397,673	207,090	125,205	74,367	150,581	2,017,952	\$19.04
Natural Resources and Mining	3,300	27,617	10,791	8,503	2,009	744	371	958	54,293	\$13.75
Construction	1,035	14,157	23,049	28,928	18,746	10,286	3,803	4,472	104,476	\$24.03
Manufacturing	3,520	39,029	40,574	49,074	20,862	12,123	8,683	24,548	198,413	\$22.46
Wholesale Trade	1,950	15,248	15,622	20,277	9,301	5,140	3,322	10,482	81,342	\$23.16
Retail Trade	34,179	111,238	41,513	28,765	10,696	4,432	2,660	6,327	239,810	\$13.20
Transportation, Warehousing, and Utilities	1,350	13,162	13,481	15,096	6,119	4,284	2,501	5,993	61,986	\$21.44
Information	1,191	4,061	4,050	7,902	5,776	3,965	2,705	6,384	36,034	\$31.27
Financial Activities	1,680	14,029	17,582	22,297	11,205	6,399	4,267	12,518	89,977	\$24.32
Professional and Business Services	11,135	78,471	40,716	45,653	26,929	17,412	12,026	27,496	259,838	\$19.95
Private Educational Services	2,232	7,050	6,632	8,583	4,489	2,252	1,177	1,597	34,012	\$20.83
Health Care & Social Assistance	8,465	69,747	51,368	49,092	25,828	18,640	14,256	27,561	264,957	\$20.31
Leisure and Hospitality	53,947	109,340	33,529	26,658	6,234	1,911	885	2,093	234,597	\$12.00
Other Services	5,602	29,886	15,770	14,800	5,809	2,719	1,486	2,774	78,846	\$15.87
State Government	38	2,400	16,352	13,159	12,140	7,739	3,579	2,550	57,957	\$27.82
Local Government	5,485	31,748	29,263	58,687	40,854	27,086	12,589	14,694	220,406	\$26.90
Non-classifiable	30	249	173	199	93	73	57	134	1,008	\$21.64

* Count of records. Individuals holding multiple jobs will be counted more than once.

Records meeting the following conditions have been excluded from this analysis:

- 0 (zero) hours reported
- 999 hours reported
- wages < \$7.25/hr calculated
- wages > \$500/hr calculated and < 10 hours reported
- federal government employment

Source: Unemployment Insurance Wage Records

Table 2: Oregon - Fraction of Jobs by Broad Industry by Hourly Wage Level - 1st Quarter 2017*

	Under \$10.00	\$10.00 - \$14.99	\$15.00 - \$19.99	\$20.00 - \$29.99	\$30.00 - \$39.99	\$40.00 - \$49.99	\$50.00 - \$59.99	\$60.00 or more	Total
Total - All Industries	6.7%	28.1%	17.9%	19.7%	10.3%	6.2%	3.7%	7.5%	100.0%
Natural Resources and Mining	6.1%	50.9%	19.9%	15.7%	3.7%	1.4%	0.7%	1.8%	100.0%
Construction	1.0%	13.6%	22.1%	27.7%	17.9%	9.8%	3.6%	4.3%	100.0%
Manufacturing	1.8%	19.7%	20.4%	24.7%	10.5%	6.1%	4.4%	12.4%	100.0%
Wholesale Trade	2.4%	18.7%	19.2%	24.9%	11.4%	6.3%	4.1%	12.9%	100.0%
Retail Trade	14.3%	46.4%	17.3%	12.0%	4.5%	1.8%	1.1%	2.6%	100.0%
Transportation, Warehousing, and Utilities	2.2%	21.2%	21.7%	24.4%	9.9%	6.9%	4.0%	9.7%	100.0%
Information	3.3%	11.3%	11.2%	21.9%	16.0%	11.0%	7.5%	17.7%	100.0%
Financial Activities	1.9%	15.6%	19.5%	24.8%	12.5%	7.1%	4.7%	13.9%	100.0%
Professional and Business Services	4.3%	30.2%	15.7%	17.6%	10.4%	6.7%	4.6%	10.6%	100.0%
Private Educational Services	6.6%	20.7%	19.5%	25.2%	13.2%	6.6%	3.5%	4.7%	100.0%
Health Care & Social Assistance	3.2%	26.3%	19.4%	18.5%	9.7%	7.0%	5.4%	10.4%	100.0%
Leisure and Hospitality	23.0%	46.6%	14.3%	11.4%	2.7%	0.8%	0.4%	0.9%	100.0%
Other Services	7.1%	37.9%	20.0%	18.8%	7.4%	3.4%	1.9%	3.5%	100.0%
State Government	0.1%	4.1%	28.2%	22.7%	20.9%	13.4%	6.2%	4.4%	100.0%
Local Government	2.5%	14.4%	13.3%	26.6%	18.5%	12.3%	5.7%	6.7%	100.0%
Non-classifiable	3.0%	24.7%	17.2%	19.7%	9.2%	7.2%	5.7%	13.3%	100.0%

* Count of records. Individuals holding multiple jobs will be counted more than once.

Records meeting the following conditions have been excluded from this analysis:

- 0 (zero) hours reported
- 999 hours reported
- wages < \$7.25/hr calculated
- wages > \$500/hr calculated and < 10 hours reported
- federal government employment

Source: *Unemployment Insurance Wage Records*

Table 3: Oregon - Fraction of Jobs by Hourly Wage Level by Broad Industry - 1st Quarter 2017*

	Under \$10.00	\$10.00 - \$14.99	\$15.00 - \$19.99	\$20.00 - \$29.99	\$30.00 - \$39.99	\$40.00 - \$49.99	\$50.00 - \$59.99	\$60.00 or more	Total
Total - All Industries	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Natural Resources and Mining	2.4%	4.9%	3.0%	2.1%	1.0%	0.6%	0.5%	0.6%	2.7%
Construction	0.8%	2.5%	6.4%	7.3%	9.1%	8.2%	5.1%	3.0%	5.2%
Manufacturing	2.6%	6.9%	11.3%	12.3%	10.1%	9.7%	11.7%	16.3%	9.8%
Wholesale Trade	1.4%	2.7%	4.3%	5.1%	4.5%	4.1%	4.5%	7.0%	4.0%
Retail Trade	25.3%	19.6%	11.5%	7.2%	5.2%	3.5%	3.6%	4.2%	11.9%
Transportation, Warehousing, and Utilities	1.0%	2.3%	3.7%	3.8%	3.0%	3.4%	3.4%	4.0%	3.1%
Information	0.9%	0.7%	1.1%	2.0%	2.8%	3.2%	3.6%	4.2%	1.8%
Financial Activities	1.2%	2.5%	4.9%	5.6%	5.4%	5.1%	5.7%	8.3%	4.5%
Professional and Business Services	8.2%	13.8%	11.3%	11.5%	13.0%	13.9%	16.2%	18.3%	12.9%
Private Educational Services	1.7%	1.2%	1.8%	2.2%	2.2%	1.8%	1.6%	1.1%	1.7%
Health Care & Social Assistance	6.3%	12.3%	14.3%	12.3%	12.5%	14.9%	19.2%	18.3%	13.1%
Leisure and Hospitality	39.9%	19.3%	9.3%	6.7%	3.0%	1.5%	1.2%	1.4%	11.6%
Other Services	4.1%	5.3%	4.4%	3.7%	2.8%	2.2%	2.0%	1.8%	3.9%
State Government	0.0%	0.4%	4.5%	3.3%	5.9%	6.2%	4.8%	1.7%	2.9%
Local Government	4.1%	5.6%	8.1%	14.8%	19.7%	21.6%	16.9%	9.8%	10.9%
Non-classifiable	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%

* Count of records. Individuals holding multiple jobs will be counted more than once.

Records meeting the following conditions have been excluded from this analysis:

- 0 (zero) hours reported
- 999 hours reported
- wages < \$7.25/hr calculated
- wages > \$500/hr calculated and < 10 hours reported
- federal government employment

Source: *Unemployment Insurance Wage Records*

Table 4: Oregon - Number of Jobs by Hourly Wage Level and Firm Employment Size Class - 1st Quarter 2017*

	Under \$10.00	\$10.00 - \$14.99	\$15.00 - \$19.99	\$20.00 - \$29.99	\$30.00 - \$39.99	\$40.00 - \$49.99	\$50.00 - \$59.99	\$60.00 or more	Total	Median Wage
Total - All Size Classes	135,139	567,432	360,465	397,673	207,090	125,205	74,367	150,581	2,017,952	\$19.04
Under 5 employees	6,215	34,567	22,849	21,597	9,165	5,072	3,223	8,619	111,307	\$17.67
5 - 9 employees	10,766	39,998	26,534	25,013	10,030	4,805	2,408	5,629	125,183	\$16.83
10 - 19 employees	15,507	55,563	34,333	33,057	13,811	6,648	3,348	7,225	169,492	\$16.64
20 - 49 employees	22,344	80,788	50,897	52,098	22,006	10,885	5,754	12,610	257,382	\$17.18
50 - 99 employees	12,714	57,486	36,195	39,807	19,046	9,797	5,417	10,852	191,314	\$18.22
100 - 249 employees	19,391	78,641	47,059	53,188	26,999	14,481	7,764	16,245	263,768	\$18.37
250 - 499 employees	16,859	57,832	31,455	37,558	20,223	11,950	6,395	12,784	195,056	\$18.37
500 or more employees	31,343	162,557	111,143	135,355	85,810	61,567	40,058	76,617	704,450	\$22.77

* Count of records. Individuals holding multiple jobs will be counted more than once.

Records meeting the following conditions have been excluded from this analysis:

- 0 (zero) hours reported
- 999 hours reported
- wages < \$7.25/hr calculated
- wages > \$500/hr calculated and < 10 hours reported
- federal government employment

Source: *Unemployment Insurance Wage Records*

Table 5: Oregon - Fraction of Jobs by Firm Employment Size Class by Hourly Wage Level - 1st Quarter 2017*

	Under \$10.00	\$10.00 - \$14.99	\$15.00 - \$19.99	\$20.00 - \$29.99	\$30.00 - \$39.99	\$40.00 - \$49.99	\$50.00 - \$59.99	\$60.00 or more	Total
Total - All Size Classes	6.7%	28.1%	17.9%	19.7%	10.3%	6.2%	3.7%	7.5%	100.0%
Under 5 employees	5.6%	31.1%	20.5%	19.4%	8.2%	4.6%	2.9%	7.7%	100.0%
5 - 9 employees	8.6%	32.0%	21.2%	20.0%	8.0%	3.8%	1.9%	4.5%	100.0%
10 - 19 employees	9.1%	32.8%	20.3%	19.5%	8.1%	3.9%	2.0%	4.3%	100.0%
20 - 49 employees	8.7%	31.4%	19.8%	20.2%	8.5%	4.2%	2.2%	4.9%	100.0%
50 - 99 employees	6.6%	30.0%	18.9%	20.8%	10.0%	5.1%	2.8%	5.7%	100.0%
100 - 249 employees	7.4%	29.8%	17.8%	20.2%	10.2%	5.5%	2.9%	6.2%	100.0%
250 - 499 employees	8.6%	29.6%	16.1%	19.3%	10.4%	6.1%	3.3%	6.6%	100.0%
500 or more employees	4.4%	23.1%	15.8%	19.2%	12.2%	8.7%	5.7%	10.9%	100.0%

* Count of records. Individuals holding multiple jobs will be counted more than once.

Records meeting the following conditions have been excluded from this analysis:

- 0 (zero) hours reported
- 999 hours reported
- wages < \$7.25/hr calculated
- wages > \$500/hr calculated and < 10 hours reported
- federal government employment

Source: Unemployment Insurance Wage Records

Table 6: Oregon - Fraction of Jobs in Hourly Wage Level by Firm Employment Size Class - 1st Quarter 2017*

	Under \$10.00	\$10.00 - \$14.99	\$15.00 - \$19.99	\$20.00 - \$29.99	\$30.00 - \$39.99	\$40.00 - \$49.99	\$50.00 - \$59.99	\$60.00 or more	Total
Total - All Size Classes	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Under 5 employees	4.6%	6.1%	6.3%	5.4%	4.4%	4.1%	4.3%	5.7%	5.5%
5 - 9 employees	8.0%	7.0%	7.4%	6.3%	4.8%	3.8%	3.2%	3.7%	6.2%
10 - 19 employees	11.5%	9.8%	9.5%	8.3%	6.7%	5.3%	4.5%	4.8%	8.4%
20 - 49 employees	16.5%	14.2%	14.1%	13.1%	10.6%	8.7%	7.7%	8.4%	12.8%
50 - 99 employees	9.4%	10.1%	10.0%	10.0%	9.2%	7.8%	7.3%	7.2%	9.5%
100 - 249 employees	14.3%	13.9%	13.1%	13.4%	13.0%	11.6%	10.4%	10.8%	13.1%
250 - 499 employees	12.5%	10.2%	8.7%	9.4%	9.8%	9.5%	8.6%	8.5%	9.7%
500 or more employees	23.2%	28.6%	30.8%	34.0%	41.4%	49.2%	53.9%	50.9%	34.9%

* Count of records. Individuals holding multiple jobs will be counted more than once.

Records meeting the following conditions have been excluded from this analysis:

- 0 (zero) hours reported
- 999 hours reported
- wages < \$7.25/hr calculated
- wages > \$500/hr calculated and < 10 hours reported
- federal government employment

Source: Unemployment Insurance Wage Records

Table 7: Oregon - Unemployment Insurance Wage Record Summary Statistics, 1st Quarter 2017

	Count	12-Month Percent Change	Percent of Total SSNs	Total Wages	12-Month Percent Change	Percent of Total Wages	Mean Wages Per Quarter	12-Month Percent Change
Total SSNs	1,851,825	3.1%	100.0%	\$ 22,837,804,835	9.1%	100.0%	\$ 12,333	5.9%
One Job	1,660,316	2.6%	89.7%	\$ 21,037,583,495	8.9%	92.1%	\$ 12,671	6.1%
Two Jobs	168,512	6.8%	9.1%	\$ 1,602,401,212	11.9%	7.0%	\$ 9,509	4.7%
Three Jobs	19,069	12.3%	1.0%	\$ 161,124,859	19.1%	0.7%	\$ 8,450	6.1%
Four or More Jobs	3,928	11.9%	0.2%	\$ 36,695,269	12.2%	0.2%	\$ 9,342	0.2%
Total Records	2,072,550	3.6%						
Records per SSN	1.12							
Two or More Jobs	191,509	7.5%	10.3%					
Workers in Oregon's workforce in 1st Quarter 2017 who:								
- did not work in Oregon in 4th quarter 2016	112,915	0.7%						
- had not worked in Oregon since 1990	35,466	-4.7%						
- returned to Oregon's workforce*	77,449	3.3%						
Percent in workforce one year ago	82.9%							
Percent in same primary industry	85.0%							
Percent in new primary industry (3-digit NAICS)	15.0%							

*Did not work in Oregon in 4th Quarter 2016, but have worked in Oregon at some point since 1990.

Source: Unemployment Insurance Wage Records

Table 8: Oregon - Quarterly Wages by Quintile and Hours Worked, 1st Quarter 2017

2017 1st Quarter Wages

All Workers

	All ¹	Quintile				
		1	2	3	4	5
Quintiles		\$3,449	\$6,753	\$10,500	\$17,092	NA
Mean	\$12,333	\$1,637	\$5,132	\$8,506	\$13,407	\$32,976
Median	\$8,453	\$1,597	\$5,148	\$8,451	\$13,217	\$24,071

¹1,851,825 SSNs

Employed 200+ Hours

	All ²	Quintile				
		1	2	3	4	5
Quintiles		\$5,531	\$8,358	\$12,125	\$18,714	NA
Mean	\$14,292	\$3,964	\$6,922	\$10,101	\$15,046	\$35,426
Median	\$10,023	\$4,050	\$6,911	\$10,023	\$14,885	\$25,985

²1,523,528 SSNs

Employed 350+ Hours

	All ³	Quintile				
		1	2	3	4	5
Quintiles		\$6,913	\$9,675	\$13,573	\$20,267	NA
Mean	\$15,991	\$5,413	\$8,253	\$11,495	\$16,537	\$38,257
Median	\$11,440	\$5,543	\$8,238	\$11,440	\$16,350	\$27,973

³1,249,322 SSNs

Percent Change from Prior Year

All Workers

	All ¹	Quintile				
		1	2	3	4	5
Quintiles		4.1%	5.4%	5.7%	5.8%	NA
Mean	5.9%	3.6%	5.0%	5.5%	5.8%	6.3%
Median	5.6%	3.1%	5.1%	5.6%	5.8%	5.9%

Employed 200+ Hours

	All ²	Quintile				
		1	2	3	4	5
Quintiles		6.0%	5.9%	5.9%	5.7%	NA
Mean	6.2%	5.5%	5.9%	5.9%	6.0%	6.5%
Median	5.9%	5.3%	5.9%	5.9%	6.2%	6.1%

Employed 350+ Hours

	All ³	Quintile				
		1	2	3	4	5
Quintiles		6.2%	5.9%	6.2%	5.7%	NA
Mean	6.2%	6.1%	5.9%	6.1%	6.0%	6.4%
Median	6.2%	6.5%	6.0%	6.2%	6.1%	6.4%

Source: Unemployment Insurance Wage Records