Washington Earnings and Male-Female Differences in Earnings, 1999

Research Brief 26A: Total Earnings for All Adults Aged 18 to 64 in 1999

In 2000, the long form of the United States Decennial Census asked Washington State residents what their earnings were in 1999. Earnings include wage, salary, commission, bonus, and tip income from all jobs before deductions and/or net income from self-employment. The mean (or “average”) earnings for all Washington State adults aged 18 to 64 were $28,291, but half of the adult population earned $20,000 or less. At the two ends of the earnings distribution, one sees that seventeen percent of the population had zero earnings and just over one percent earned over $140,000. Read Research Brief 26A ...

Research Brief 26B: Differences in Total Earnings for Male and Female Adults in Washington State

Looking at all adults aged 18 to 64 in 1999, one finds the gap between male and female earnings – not controlling for differences in occupation or adjusting for part-time work – is quite large. Men’s mean earnings were $37,230 compared to women’s $19,251. Men’s median earnings were $29,400 – over twice the size of women’s median earnings ($13,300). The fact that women were less likely to have earnings at all contributed to the gap in earnings between men and women. Twenty-three percent of women had zero earnings compared to 11 percent of men. Read Research Brief 26B ...

Research Brief 26C: How Much Did Men and Women Work in 1999?

Mean and median earnings comparisons are affected by the extent of full-time versus part-time work. Men are much more likely than women to work full-time. Sixty-four percent of men work full-time compared to 41 percent of women. Women, compared to men, were more likely to work part-time or not at all. Thirty-seven percent of women worked part-time and 23 percent did not work at all. In comparison, 25 percent of men worked part-time and 11 percent did not work at all. Read Research Brief 26C ...

Research Brief 26D: Earnings for Full-Time Washington State Workers By Sex: 1999

Another way to compare male and female earnings is to examine only full-time workers. Women earn considerably less than men, even when comparing similar work levels; however the earnings gap is smaller than for all Washington State residents. Men’s full-time mean earnings were $49,929 compared to $34,331 for women. On average, women who work full-time only earn 69 percent of what male full-time workers earn. The gap in earnings by sex is the smallest at the bottom of the earnings distribution and the largest at the top of the earnings distribution. Women at the bottom ten percent of the earning distribution earn 80 percent of what men in this segment of the earnings distribution. Women at the 90th percentile earn 70 percent of what the men at the 90th percentile earn. Read Research Brief 26D ...
Using data from the 2000 five percent Public Use Microdata Sample (PUMS), total earnings were examined for Washington State residents aged 18 to 64. Earnings include wage, salary, commission, bonus, and tip income from all jobs before deductions and/or net income from self-employment. The distribution of the earnings is shown in Figure 1. At each end of the distribution, one sees that seventeen percent of the population had zero earnings and just over one percent earned over $140,000.

![Figure 1 – Distribution of Total Earnings In Washington State: 1999](image)

Note: Earning data was categorized in $10,000 increments with the exception of the first and last earning categories (i.e. the $10,000 earning category includes those earning $1-$10,000). The first earning category includes people with zero earnings and a small group of people with negative earnings. The last earning category includes those who earn $140,001 or more.

**Mean and Percentiles**

Washington’s earnings varied quite a bit between the top and the bottom of the earning distribution. Those at the 90th percentile earned $55,300 more than those at the 25th percentile (see Figure 2).

Washington State’s mean earnings were $28,291 in 1999, but half of the population earned less than $20,000. Seventy-five percent of the population earned $39,300 or less, and 90 percent of the population had earnings of $60,000 or less.

Why are Washington’s mean earnings higher than the median earnings? Mean earnings are derived from the sum of all earnings divided by the number of people and are very sensitive to high earnings values. In contrast, median earnings are simply the earnings at the middle of the earning distribution and are unaffected by earnings at the upper end of the distribution. High earners, such as workers with stock options in the software industry, drove mean earnings above median earnings in Washington State in 1999.  

The Washington State data used in this analysis come from the 2000 five percent Public Use Microdata Sample (PUMS). More information on these surveys can be found at the Census website: [http://www.census.gov/main/www/pums.html](http://www.census.gov/main/www/pums.html).

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In 1999, the software industry had roughly 27,300 workers making up less than one percent of Washington’s workforce. That year the software industry reported $10.3 billion in wages to the Employment Security Department. If one assumes that the real wage of each of these workers was about $100,000, then about 7.6 billion of these reported wages were a result of stock options. The high earnings of these relatively few workers raised the mean earnings. The full effect of these top earners on mean earnings is minimized somewhat by the fact that the Census top-coded wage and salary earnings at $336,000 and self-employment earnings at $245,000. Total earnings are the sum of these two values.
Using data from the 2000 five percent Public Use Microdata Sample (PUMS), total earnings were examined for Washington State residents aged 18 to 64 by sex. Earnings include wage, salary, commission, bonus, and tip income from all jobs before deductions and/or net income from self-employment. In 1999, women’s earnings were much more highly concentrated at the bottom of the earnings distribution than men’s earnings (see Figure 1). Twenty-three percent of women had zero earnings compared to 11 percent of men. Women were much less likely to have high earnings compared to men. Fifteen percent of men earned more than $60,000 compared to four percent of women.

Note: Earning data was categorized in $10,000 increments with the exception of the first and last earning categories (i.e. the $10,000 earning category includes those earning $1-$10,000). The first earning category includes people with zero earnings and a small group of people with negative earnings. The last earning category includes those who earn $140,001 or more.

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Mean and Percentiles

Both men and women had zero earnings at the 10th percentile, but that is where the similarities between the two sexes end (see Figure 2). Men’s earnings were consistently higher than women’s earnings. Men’s mean earnings were $37,230 compared to women’s $19,251. At the first quartile men were earning $10,000 more than what women were earning. The dollar gap between male and female earnings grew as the earnings percentile examined increased. At $13,300, women’s median earnings were less than half of men’s median earnings. At the 75th percentile, men’s earnings were $20,000 more than women’s. Finally, at the 90th percentile, men earned $27,000 more than what women earned.

Figure 2 – Washington State’s Total Earnings By Sex: 1999
Using data from the 2000 five percent Public Use Microdata Sample (PUMS), work level was examined for Washington State residents aged 18 to 64 by sex. In 1999, men and women exhibited very different work levels (see Figure 1). Men were much more likely than women to work full-time (64 percent versus 41 percent).\(^1\) Women, compared to men, were more likely to work part-time or not at all (i.e. no earnings). Thirty-seven percent of women worked part-time and 23 percent did not work at all. In comparison, 25 percent of men worked part-time and 11 percent did not work at all.

\[\text{Figure 1 – Distribution of Adults Aged 18 to 64 by Sex and Work Level: 1999}\]

\(^1\) Full-time work is defined as working 35 or more hours a week, 45 or more weeks a year, and having non-zero earnings. Part-time work is defined by non-zero earnings, and working less than 35 hours a week or less than 45 weeks a year. No earnings is simply defined as having zero earnings.
Using data from the 2000 five percent Public Use Microdata Sample (PUMS), total earnings for full-time workers were examined for Washington State residents aged 18 to 64 by sex.\(^1\) Women still earn considerably less than men (see Table 1). Men’s earnings range from $17,000 at the 10th percentile to $82,000 at the 90th percentile. Women’s earnings range from $13,600 at the 10th percentile to $57,000 at the 90th percentile.

On average, women who work full-time only earn 69 percent of what male full-time workers earn. The gap in earnings by sex is the smallest at the bottom of the earnings distribution and the largest at the top of the earnings distribution. Women at the bottom ten percent of the earning distribution earn 80 percent of what men at the bottom ten percent of the earning distribution earn. Women at the 90th percentile earn 70 percent of what the men at the 90th percentile earn.

<table>
<thead>
<tr>
<th>Earnings Percentile</th>
<th>Men</th>
<th>Women</th>
<th>Men-Women</th>
<th>Women’s Full-Time Earnings as a Percentage of Men’s Full-Time Earnings</th>
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</thead>
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<tr>
<td>10th</td>
<td>$17,000</td>
<td>$13,600</td>
<td>$3,400</td>
<td>80%</td>
</tr>
<tr>
<td>25th</td>
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<td>$6,000</td>
<td>77%</td>
</tr>
<tr>
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<td>$40,000</td>
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<tr>
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<tr>
<td>90th</td>
<td>$82,000</td>
<td>$57,000</td>
<td>$25,000</td>
<td>70%</td>
</tr>
</tbody>
</table>

\(^1\) Full-time work is defined as working 35 or more hours a week, 45 or more weeks a year, and having non-zero earnings. Part-time work is defined by non-zero earnings, and working less than 35 hours a week or less than 45 weeks a year. No earnings is simply defined as having zero earnings.

\(^2\) Earnings include wage, salary, commission, bonus, and tip income from all jobs before deductions and/or net income from self-employment.

The Washington State data used in this analysis come from the 2000 five percent Public Use Microdata Sample (PUMS). More information on these surveys can be found at the Census website: http://www.census.gov/main/www/pums.html.

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