# Economic Investigations 



## Economic Investigations: There Is More to the Story

"Economic Investigations: There Is More to the Story" was a National Science Foundation funded project, which began in September 2003. The Social Science Education Consortium (SSEC) of Boulder, Colorado, was the grantee agency. James Davis, Executive Director of the SSEC, was the project director, and Donald Wentworth, Professor Emeritus of Pacific Lutheran University, was project co-director.

The overall project goal was to help students achieve a deeper understanding of puzzling economics questions so they could explain and provide thorough, supported, and justifiable accounts of economic phenomena, facts, and data. Three objectives guided project development:

- Create a classroom laboratory orientation for the investigations similar to those students would encounter in a laboratory science course.
- Develop quantitative skills in students—more so than they would acquire in a standard high school economics course.
- Focus the investigations on intriguing economics questions to spark student and teacher interest.


## The Investigations

Twelve investigations were created by teams of economics curriculum materials developers and high school economics teachers. The titles of each investigation identify its content area followed by the main question addressed in the investigation. The investigation titles are:

## Microeconomic Investigations

1. Women's Wages: Do Women Earn Less Money Than Men?
2. Organ Transplants: Where Are the Missing Kidneys?
3. Minimum Wage: Does Raising the Rate Help Younger Workers?
4. Poverty: How Can a Family Be in Poverty and Not Be Poor?
5. Health Care: Who Should Pay the Cost?

## Macroeconomic Investigations

6. Performance of the National Economy: How Do We Measure the Economy's Health?
7. Inflation: Are Higher Prices the Only Problem?
8. Employment and Unemployment: How Can Both Rates Rise at the Same Time?
9. Fiscal Policy: Can Congress Diagnose and Treat an Ailing Economy?
10. Monetary Policy: Can the Federal Reserve Diagnose and Treat an Ailing Economy?

## International Investigations

11. African-U.S. Trade: What's in It for Africa?
12. Imports: Does American Employment Decline Because of International Trade?


## Investigation and Field Test Results

The investigations were field-tested by high school teachers in the spring semesters of 2004 and 2006. Field test locations included Jefferson County Colorado; Milwaukee, Wisconsin; Sioux Falls, South Dakota; Scottsdale/Mesa, Arizona; and Plano, Texas. Based on this field test, the investigations were found to promote deeper student understanding of economic issues through the use of effective instructional methods. Students acknowledged that they learned a great deal from the investigations and teachers stated they would recommend the investigations to other teachers.

## Cooperative Publishing Agreement

The Social Science Education Consortium has transferred the copyright of these investigations to JA Worldwide. JA Worldwide is making them available to teachers by posting them on the JA Worldwide website (www.ja.org) and distributing them in CD-ROM format. The investigations also will be posted on the SSEC website (www.socialscience-ed.org). Ultimately, the investigations will support the revised Junior Achievement high school program, JA Economics.

## Authorship and Consultants

The project was fortunate to have an excellent group of authors and consultants. These individuals are listed below.

Colorado Development Team
Laura Burrow, Jefferson County Public Schools
James Davis, Social Science Education Consortium
Lewis Karstensson, University of Nevada, Las Vegas

## Washington Development Team

Penny Brunken, Sioux Falls (SD) Public Schools
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The economics consultant to the project was Norris Peterson, Professor of Economics, Pacific Lutheran University, Tacoma, Washington.

The project evaluator was William Walstad, Professor of Economics, University of Nebraska, Lincoln.

Nancy Baldrica, Excelsior, Minnesota, served in an editorial and desktop-publishing capacity on the project.


## Field-Test Teachers

Below are the teachers who completed field tests during the second year of the project.

## Arizona

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# Investigation \#1: Women's Wages: Do Women Earn Less Money than Men? 

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## Investigation \# 1:

Women's Wages: Do Women Earn Less Money than Men?

## Introduction

## History of Women in the Workforce

Since 1979, women have been increasingly involved in the U.S. economic system. In that year, women's median weekly earnings for full-time wage and salary workers were $63 \%$ of men's weekly earnings. In 2001, women were earning $76 \%$ of men's weekly earnings. Real earnings for white women improved by $24.6 \%$ between 1979 and 2001. For white men during the same time period, real earnings grew by $2.4 \%$. Women and men with less than a high school education have seen their real incomes decrease since 1979. The former has seen a $9.0 \%$ reduction, while the latter has experienced a $27.6 \%$ decrease in earnings. For women with college degrees, their real income has increased by $30.9 \%$, while men with college degrees have had their real income increase by $20.2 \%$ (Highlights of Women's Earnings in 2001).

## Student Comprehension

This investigation will help students examine data related to wage and salaries earned by women and men, including the following questions:

- What is the current status of women's earnings in relation to men's?
- What may influence the differences between women's and men's earnings?

In this investigation, students are asked to study data regarding the earnings of women and men. Upon viewing the data, students should propose several hypotheses regarding the differences in earnings between women and men. The investigation concludes with a discussion of the students' findings.


## Concepts

Choices
Income
Human Capital

## Objectives

After completing this investigation, students will be able to

- Use economic reasoning to explain the wages of women and men.
- Critically analyze data.


## Economic Principles

The analysis of wage determination, and particularly why individuals earn different amounts of income, can be rather challenging. From a theoretical approach, one could argue either labor is hired under purely competitive market conditions or non-competitive market conditions. In the former scenario, one has no control over the wage. In the latter, an individual will accept less than the competitive wage. An individual could join a union, which generally results in wages above the competitive wage, but the potential for a smaller number of employed workers often is present. The addition of discrimination in the workplace adds greater complexity to wage determination. The use of economics can assist in understanding how wages are determined, and explain why different individuals earn different amounts of income.


## Investigation

## Description

Students begin the investigation by exploring wage differences/similarities among their classmates. With the use of computers and a pre-selected website, students review national data concerning the earnings of women and men. The investigation concludes by discussing the results of students' research.

Time Required: 70 minutes

## Materials

Visual \#1 Teenage Wage Comparison
Visual \#2 Median Usual Weekly Earnings of Part-Time Wage and Salary Workers by Selected Characteristics, 2001 Annual Averages
Visual \#3 Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Selected Characteristics, 2001 Annual Averages
Visual \#4 Why Do Women Earn Less than Men?
Activity \#1 Wage Earnings of Women and Men

## Procedure

1. Tell students this investigation will examine the issue of wage-earning differences between women and men. Explain that statistics show full-time wage and salary earning women, on average, brought home $76 \%$ of the full- time wage and salary earnings, on average, of men (Highlights of Women's Earnings in 2001).
2. Display Visual \#1 - Teenage Wage Comparison. The transparency has four columns: (1) Wage Per Hour, beginning at the Federal Minimum Wage of \$5.15, and increasing by 25 -cent increments; (2) Females; (3) Males; and (4) Total. Going through each set of wages, have students raise their hands for the wage they earn, and record it in the appropriate column on the transparency.
3. Discuss the results. Most likely, you'll find that students (both female and male) are earning relatively similar wages. Ask students why this occurs. Potential responses might include that students have similar limited skills, that they all work in entry-level positions, or that they have limited work experience.
4. Continue looking at the data created by the class. It's likely that some students will not be represented on the wage earning transparency. This is because not all students will have jobs. Ask these students why they are not working. Possible responses might include that their parents/guardians provide their income, that they need to focus on academics, or that they do not want to work.
5. Display Visual \#2 - Median Usual Weekly Earnings of Part-Time Wage and Salary Workers by Selected Characteristics, 2001 Annual Averages. This data shows how females and males between the ages of 16 and 19 reported earnings.

6. Display Visual \#3 - Median Usual Weekly Earning of Full-Time Wage and Salary Workers by Selected Characteristics, 2001 Annual Averages. This data shows how females and males between the ages of 45 and 54 reported earnings. For both genders, this age group represents maximum earnings.
7. Distribute Activity \#1 - Wage Earnings of Women and Men. Students should use a computer to answer the questions on the handout. They will have to access the report Highlights of Women's Earnings in 2001at www.bls.gov/ cps/cpswom2001.pdf. It also can be accessed by doing a browser search for Highlights of Women's Earnings in 2001.
8. Allow students 30 minutes to complete the activity. Then discuss their answers.

Answers to Activity \#1 - Wage Earnings of Women and Men
Directions: Thus far in the investigation, you have discussed the wages of your classmates and examined the role of incentives. You now will study government-gathered data to draw conclusions regarding wage and salary earnings of women and men. The report needed for this activity is found online at www.bls.gov/cps/cpswom2001.pdf.

1. Using Table 1 on page 7, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Selected Characteristics, how many women workers, ages 16 and older were working full-time in 2001?
Answer: 43,671 thousand
How many men?
Answer: 55,928 thousand
2. Using Table 1 on page 7, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Selected Characteristics, how many women workers, ages 16 and older were working full-time in 2001?
Answer: 43,671 thousand
How many men?
Answer: 9,056 thousand
What would be the financial consequences for women with these membership figures?
Answer: Women would be earning less money than men, as unions often pay $15 \%$ higher than non-union wage earners.
3. Using Table 1 on page 7, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Selected Characteristics, what happens to the earnings for women and men as they increase their level of educational attainment?

Answer: They increase.
4. Using Table 2 on page 8, Median Usual Weekly Earnings of Full-Time


Wage and Salary Workers by Occupation and Sex for 1983 and 2001, what percentage of women 16 years and over were members of the workforce in 1983?
Answer: 40.4\%

In 2001?
Answer: 43.8\%
With your current level of understanding of labor force participation, what could cause these types of numbers to occur?
Answer: Accept any suggested answers. The conclusion of the investigation will answer these questions more formally.
5. Using Table 2 on page 8, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Occupation and Sex for 1983 and 2001, which occupation saw the greatest increase for women from 1983 to 2001?
Answer: Executive, administrative, and managerial specialty: 34.2\% in 1983 to $47.1 \%$ in 2001.

Which occupation saw the greatest decline for women from 1983 to 2001?
Answer: Machine operators, assemblers, and inspectors: $40.8 \%$ in 1983 to $34.9 \%$ in 2001.
6. Using Table 2 on page 8, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Occupation and Sex for 1983 and 2001, which occupation had the highest median weekly earnings for women in 2001?
Answer: Professional specialty, \$749.
For men in 2001?
Answer: Executive, administrative, and managerial, \$1,060.
7. Using Table 2 on page 8, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Occupation and Sex for 1983 and 2001, which occupation had the lowest median weekly earnings for women in 2001?
Answer: Private household service occupations, \$255.

For men in 2001?
Answer: Farming, forestry, and fishing, \$366.

8. Using Table 2 on page 8, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Occupation and Sex for 1983 and 2001, which two occupations had the greatest percentage of women workers in 2001?
Answer: Administrative support, including clerical and service occupations in private households.

Which five occupations had the smallest percentage of women workers in 2001?
Answer: Service occupations in protective services; precision production, craft and repair; transportation and material moving occupations; handlers, equipment cleaners, helpers, and laborers; and farming, forestry, and fishing.

With your current level of understanding of various occupations, why would women and men tend to enter these occupations?
Answer: Accept any suggested answers. The conclusion of the investigation will answer these questions more formally.
9. Looking at Table 2 on page 8, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Occupation and Sex for 1983 and 2001, it appears that the number of female and male workers are relatively equally represented in executive, administrative, and managerial occupations; professional specialty occupations; technicians and related support occupations; and service occupations. Investigating each of these categories in greater detail using table 3 on pages 9 through 14, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Detailed Occupation and Sex for 2001, what conclusions can one draw about each of the four broad categories listed above?
Answer: For executive, administrative, and managerial occupations, one finds women concentrated in managers, medicine and health, and personnel, training, and labor relations specialists. Men tend to be concentrated in administration, protective services and construction inspectors. For the remainder of the category, women and men seem to equally share numerical advantages across the various occupations.

For professional specialty, there is a definite division between women and men. The former is concentrated in health assessment and treating occupations, teachers, except college and university, counselors, librarians, and social workers. The latter is concentrated in engineering, architecture, and surveying, mathematical and computer scientists, and health diagnosing occupations, including physicians.
For technicians and related support, women constitute the majority of workers in health technologists and technicians, including licensed practical nurses, and legal assistants. Men are found mainly in engineering and related technologists and technicians, chemical technicians, airplane pilots and navigators; and computer programmers.


For service occupations, one finds women in private household occupations, including child care and cleaners/servants; health service occupations, including dental assistants, health aides, nursing aides, orderlies, and attendants, and personal service occupations. Men can be found primarily in protective services, such as police and detectives, firefighting and fire prevention, and janitors and cleaners.
10. Using Table 5 on page 16, Median Usual Weekly Earnings of PartTime Wage and Salary Workers by Selected Characteristics, how many women ages 25 and older had part-time jobs in 2001?
Answer: 9,721 thousand.
How many men ages 25 and older had part-time jobs in 2001? Answer: 3,077 thousand.
11. Using Table 6 on page17, Median Usual Weekly Earnings of Employed (Full- and Part-Time) Wage and Salary Workers by Hours Usually Worked and Sex, in order to be categorized as a full-time employee, one must work 35 hours or more per week. How many women workers completed 35 or more hours per week in 2001? Answer: 41,650 thousand.

How many men workers completed 35 or more hours per week in 2001?
Answer: 52,499 thousand
What do such numbers indicate for women's earnings?
Answer: Accept any suggested answers. The investigation's conclusion of the investigation will answer these questions more formally.
12. Using Table 9 on page 20, Median Usual Weekly Earnings Distribution of Full-Time Wage and Salary Workers by Sex, Marital Status, and Presence and Age of Children Under 18 years old, 2001 annual average, for women in all three categories, when do they earn the least amount of money?
Answer: When children are under six years of age
Why?
Answer: Accept any suggested answers. The investigation's conclusion will answer these questions more formally.

For women in all three categories, when do they earn the most amount of money?
Answer: When there are no children under the age of 18 .


Why?
Answer: Accept any suggested answers. The conclusion of the investigation will answer these questions more formally.

For men in all three categories, when do they earn the least amount of money?
Answer: When there are children under six years of age and when there are no children under the age of 18 .

Why?
Answer: Accept any suggested answers. The investigation's conclusion will answer these questions more formally.

For men in all three categories, when do they earn the most amount of money?
Answer: With children 6 to 17, none younger.

Why?
Answer: Accept any suggested answers. The investigation's conclusion will answer these questions more formally.
9. Display Visual \#4 - Why Do Women Earn Less Money Than Men? Discuss the points listed on the visual. Many of these points are based upon the Internet activity.

- There are more men than women in the workforce. Men are $56.2 \%$ of the workforce, while women are $43.8 \%$. Women are increasing their participation in the workforce, as question Number 3 references. This is the result of women having fewer children (2.1), more women attending and graduating from college, and longer life expectancy (79 years of age), which provides women with a greater opportunity to use their educational degrees during their employment years (Blau, 116).
- Women are not as unionized as men. Therefore, women have not obtained many of the wage and fringe benefits a union provides. This has been changing, as unions are organizing in occupations "heavily represented by women, such as the public sector, and among white-collar and service workers, including clerical, grocery, and health care workers (Blau, 293)."
- Occupational segregation. Question 4 indicates women are moving into managerial and professional specialty occupations (which has the second highest median weekly earnings for women and men). Question 7 demonstrates women (and men) are definitely strongly represented in certain occupations (women in administrative support and service occupations; men in service occupations in protective services; precision production, craft and repair; transportation and material moving occupations; handlers, equipment cleaners, helpers,

and laborers; and farming, forestry, and fishing). Women have increasingly entered occupations dominated by men. In "1999, women constituted more than 20 percent of workers in such formerly predominantly male occupations as chemists, computer systems analysts and scientists, lawyers, operations researchers, pharmacists, and physicians (Blau, 139)." As Question 8 indicates, the broad category of a particular set of occupations can show relatively equal numbers of female and male participants, but upon closer review, you will find heavy concentrations of women and men in various occupations.
- Household responsibilities. In 1978, women averaged 20.1 hours per week in market work and averaged 26.7 hours per week in housework. In 1988, the average number of hours per week women spent in market work increased to 26.4 , while the average number of hours per week spent completing housework decreased to 21.3 hours. In 1978, men averaged 42.5 hours per week in market work, and averaged 6.1 hours per week in housework. In 1988, the average number of hours per week men spent in market work increased to 43.3, while the average number of hours per week spent completing housework increased to 7.4 hours (Blau, 57). Women are still the primary individuals responsible for shopping, taking care of the children (if present), and cleaning/maintaining the house. This is a huge responsibility and may impact the number of hours one can provide to market work, knowing one has a great deal of additional tasks to complete once the work day is complete. This may account for women having a larger share of part-time employment (Question 9). Referring to children and Question 11, women are likely to earn less money where children under six years of age are present, because women may opt to stay home with an infant rather than select day care. (Improved day-care options have allowed more women to enter the labor force.) As the children get older and attend school, women can re-enter the workforce and work more hours, thus increasing earnings.
- Fewer hours of work. As Question 10 references, a greater number of men work more than 35 hours per week than women. In 2001, in the 35-39 hour per week category, more women supplied labor than men. In every category from 40 hours to more than 60 hours, more male workers supplied labor than women. This category includes salaried employees, indicating they earn extra income for more hours, but some male (and female) workers are hourly employees, indicating they would possibly earn time and one-half beyond 40 hours completed. This leads to one gender having more income than another.

- Discrimination. According to Webster's New World Dictionary, discrimination is defined as making "distinctions in treatment; to show partiality or prejudice." Discrimination leads to inefficiency, as the individual is not given the opportunity to pursue his or her interests. Thus society loses the contribution of the individual, and the individual is required to find employment in a less desirable occupation (Albelda, 87). Discrimination also can lead to lower wages. If an employer comes along and is willing to hire the individual who has been discriminated against, the employer knows he can offer the individual a below-market wage, since the only alternative is the less-desirable occupation (Albelda, 88). Underemployment also may result from discrimination, as one is participating in an occupation for which they are over-qualified (Blau, 276).


## Closure

Ask students to summarize the main points of the investigation on earnings between women and men:

- What are some current trends regarding earnings between men and women?

Answer: Currently, women earn 76\% of men's weekly earnings, indicating a narrowing in the gender-gap earnings ratio. Women are increasing their participation in the labor force. The continuation of an increasing number of college degrees earned by women, particularly in traditionally male occupations, may assist in future reductions in the gender-gap earnings ratio. Parents opting to have fewer children, and often later in life, allows for the establishment of consistent workforce attachment, and may provide an easier transition to market work after child-rearing.

## Multiple Choice (3)

1. A woman can increase her median weekly earnings by engaging in all of the following situations, except:
a. Joining a union.
b. Obtaining a college degree
c. Increasing on-the-job training participation.
d. Having a full-time occupation, with two children under the age of six years old.
2. Women have been increasing their participation in the labor force because they are:
a. Furthering their education beyond high school.
b. Deciding to have fewer children.
c. Living longer and having an improved opportunity for a greater return on their market work experience.
d. All of the above.
3. All of the following have contributed to women receiving less median weekly earnings than men, except:
a. Discrimination toward women in market work.
b. Women working more hours per week than men.
c. The continuation of women being the adult figure responsible for household activities.
d. Women often being occupationally segregated.

## Investigation \#1 - Assessment \#1

ANSWER KEY
Multiple Choice (3)
(Answers are shown in bold.)

1. A woman can increase her median weekly earnings by engaging in all of the following situations, except:
a. Joining a union.
b. Obtaining a college degree
c. Increasing on-the-job training participation.
d. Having a full-time occupation, with two children under the age of six years old.
2. Women have been increasing their participation in the labor force because they are:
a. Furthering their education beyond high school.
d. Deciding to have fewer children.
e. Living longer and having an improved opportunity for a greater return on their market work experience.
d. All of the above.
3. All of the following have contributed to women receiving less median weekly earnings than men, except:
a. Discrimination toward women in market work.
b. Women working more hours per week than men.
c. The continuation of women being the adult figure responsible for household activities.
d. Women often being occupationally segregated.

## Investigation \#1 - Assessment \#2

## Essay (2)

1. You are a member of a think tank investigating women's earnings. What are your recommendations for reducing the gender-gap earnings ratio?
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## Investigation \#1 - Assessment \#2, page 2

2. Based upon this investigation, would you view going to a four-year college/ technical school to be significant to your lifetime earnings? Why? What factors may influence your field of study?

## Essay (2)

1. You are a member of a think tank investigating women's earnings. What are your recommendations for reducing the gender-gap earnings ratio?
Answer: The reduction of market work discrimination would have to be high on the list. The establishment of an unbiased work-performance evaluative device would assist in this area, as well as equitable hiring opportunities and practices. Women also should be encouraged to further their education, especially in the mathematic and science fields, which provide opportunities to enter traditionally male occupations. For women who are married, increase the awareness among men of the numerous hours women spend in household activities and encourage the latter to assist in those household tasks. This may enhance the opportunities for women to increase their hours in market work.
2. Based upon this investigation, would you view going to a four-year college/ technical school to be significant to your lifetime earnings? Why? What factors may influence your field of study?

Answer: When investigating data on earnings based upon education, one finds those individuals with a college degree tend to earn more than those without, over the lifetime of an employee. This would occur through education, making a person more productive in market work. For high school students, factors to consider when selecting a field of study certainly should include potential earnings. They also should look at the number of people currently employed in that occupation and the possibility of finding employment upon graduation. Advancement and growth opportunities should also factor into the decision.

## Teenage Wage Comparison

| WAGE PER <br> HOUR | FEMALES | MALES | TOTAL |
| :--- | :--- | :--- | :--- |
| $\$ 5.15-\$ 5.24$ |  |  |  |
| $\$ 5.25-\$ 5.49$ |  |  |  |
| $\$ 5.50-\$ 5.74$ |  |  |  |
| $\$ 5.75-\$ 5.99$ |  |  |  |
| $\$ 6.00-\$ 6.24$ |  |  |  |
| $\$ 6.25-\$ 6.49$ |  |  |  |
| $\$ 6.50-\$ 6.74$ |  |  |  |
| $\$ 6.75-\$ 6.99$ |  |  |  |
| $\$ 7.00-\$ 7.24$ |  |  |  |
| $\$ 7.25-\$ 7.49$ |  |  |  |
| $\$ 7.50-\$ 7.74$ |  |  |  |
| $\$ 7.75-\$ 7.99$ |  |  |  |
| $\$ 8.00-\$ 8.24$ |  |  |  |
| $\$ 8.25-\$ 8.49$ |  |  |  |
| $\$ 8.50-\$ 8.74$ |  |  |  |
| $\$ 8.75-\$ 8.99$ |  |  |  |
| $\$ 9.00-\$ 9.24$ |  |  |  |
| $\$ 9.25-\$ 9.49$ |  |  |  |
| Over \$9.50 |  |  |  |

# Median Usual Weekly Earnings of Part-Time Wage and Salary Workers by Selected Characteristics, 2001 Annual Averages 

| Characteristics | BOTH <br> SEXES <br> Number of <br> Workers <br> (in <br> thousands) | Median <br> Weekly | WOMEN <br> Number of <br> Workers <br> (in thousands) | Median <br> Weekly <br> Earnings | MEN <br> Number of <br> Workers <br> (in thousands) | Median <br> Weekly <br> Earnings | WOMENS <br> EARNINGS AS <br> PERCENT OF <br> MEN'S |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| AGE |  |  |  |  |  |  |  |
| Total <br> $\mathbf{1 6}$ years and <br> over | 20,926 | $\$ 180$ | 14,259 | $\$ 186$ | 6,667 | $\$ 168$ | 110.4 |
| $\mathbf{1 6}$ to $\mathbf{1 9}$ <br> years | 4,604 | $\$ 117$ | 2,437 | $\$ 114$ | 2,166 | $\$ 121$ |  |

Source: www.bls.gov/cps/cpswom2001.pdf (page 16).

# Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Selected Characteristics, 2001 Annual Averages 

| Characteristics | BOTH <br> SEXES <br> Number of Workers (in thousands) | Median <br> Weekly <br> Earnings | WOMEN <br> Number of Workers (in thousands) | Median <br> Weekly <br> Earnings | MEN <br> Number of Workers (in thousands) | Median <br> Weekly <br> Earnings | WOMENS EARNINGS AS PERCENT OF MEN'S |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGE |  |  |  |  |  |  |  |
| Total 16 years and over | 99,599 | \$597 | 43,671 | \$511 | 55,928 | \$672 | 76.1 |
| $45 \text { to } 54$ years | 23,733 | \$693 | 10,867 | \$588 | 12,865 | \$799 | 73.6 |

Source: www.bls.gov/cps/cpswom2001.pdf (page 7).

# Why Do Women Earn Less Money Than Men? 

- There are more men than women in the workforce.
- Women are not as unionized as men.
- Occupational segregation.
- Household responsibilities.
- Fewer hours of work.
- Discrimination.


## Wage Earnings of Women and Men

Directions: Thus far in the investigation, you have discussed the wages of your classmates and examined the role of incentives. You now will study government-gathered data to draw conclusions regarding wage and salary earnings of women and men. The website is found online at www.bls.gov/cps/cpswom2001.pdf.

1. Using Table 1 on page 7, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Selected Characteristics, how many women workers, ages 16 and older were working full-time in 2001? $\qquad$ How many men? $\qquad$
2. Using Table 1 on page 7, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Selected Characteristics, how many women workers were members of unions in 2001?
How many men?
What would be the financial consequences for women with these membership figures? $\qquad$
3. Using Table 1 on page 7, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Selected Characteristics, what happens to earnings as women and men increase their level of educational attainment?
4. Using Table 2 on page 8, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Occupation and Sex for 1983 and 2001, what percentage of women 16 years and over were members of the workforce in 1983 ? $\qquad$
In 2001?
With your current level of understanding of labor force participation, what could cause these types of numbers to occur? $\qquad$
5. Using Table 2 on page 8, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Occupation and Sex for 1983 and 2001, which occupation saw the greatest increase for women from 1983 to 2001? $\qquad$
Which occupation saw the greatest decline for women from 1983 to 2001?
6. Using Table 2 on page 8, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Occupation and Sex for 1983 and 2001, which occupation had the highest median weekly earnings for women in 2001?
For men in 2001?
7. Using Table 2 on page 8, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Occupation and Sex for 1983 and 2001, which occupation had the lowest median weekly earnings for women in 2001?
For men in 2001?
8. Using Table 2 on page 8, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Occupation and Sex for 1983 and 2001, which two occupations had the greatest percentage of women workers in 2001?
Which five occupations had the smallest percentage of women workers in 2001?

With your current level of understanding of various occupations, why would women and men tend to enter these occupations?
9. Looking at Table 2 on page 8, Median Usual Weekly Earnings of FullTime Wage and Salary Workers by Occupation and Sex for 1983 and 2001, one finds the number of female and male workers are relatively equally represented in executive, administrative, and managerial occupations; professional specialty occupations; technicians and related support occupations; and service occupations. Investigating each of these categories in greater detail using Table 3 on pages 9 through 14, Median Usual Weekly Earnings of Full-Time Wage and Salary Workers by Detailed Occupation and Sex for 2001, what conclusions can you draw about each of the four broad categories listed above?
$\qquad$
10. Using Table 5 on page16, Median Usual Weekly Earnings of Part-Time Wage and Salary Workers by Selected Characteristics, how many women ages 25 and older had part-time jobs in 2001?

How many men ages 25 and older had part-time jobs in 2001?
11. Using Table 6 on page17, Median Usual Weekly Earnings of Employed (Full- and Part-Time) Wage and Salary Workers by Hours Usually Worked and Sex, in order to be categorized as a full-time employee, one must work 35 hours or more per week. How many women workers completed 35 or more hours per week in 2001?

How many male workers completed 35 or more hours per week in $2001 ?$

What do such numbers indicate for women's earnings?
12. Using Table 9 on page 20, Median Usual Weekly Earnings Distribution of Full-Time Wage and Salary Workers by Sex, Marital Status, and Presence and Age of Children Under 18 years old, 2001 annual average, for women in all three categories, when do they earn the least money? $\qquad$

Why? $\qquad$
For women in all three categories, when do they earn the most amount of money? $\qquad$
Why? $\qquad$
For men in all three categories, when do they earn the least amount of money? $\qquad$

Why? $\qquad$
For men in all three categories, when do they earn the most amount of money? $\qquad$
Why? $\qquad$

## Investigation \#1- Works Cited

## Works Cited List

Albelda, R., Drago, R.W., \& Shulman, S. (2001). Unlevel Playing Fields: Understanding Wage Inequality and Discrimination. Cambridge, Massachusetts: Economic Affairs Bureau, Inc.

Blau, F.D., Ferber, M.A., and Winkler, A.E. (2002). The Economics of Women, Men, and Work. (4th Ed.). Upper Saddle River, New Jersey: Prentice Hall.

Highlights of Women's Earnings in 2001: www.bls.gov/cps/cpswom2001.pdf

