

CHAPTER 19

# Earnings and Discrimination

PRINCIPLES OF  
**Economics**  
N. Gregory Mankiw

Premium PowerPoint Slides  
by Ron Cronovich

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**In this chapter,  
look for the answers to these questions:**

- § How do wages compensate for differences in job characteristics?
- § Why do people with more education earn higher wages?
- § Why are wages sometimes above their equilibrium values?
- § Why is it difficult to measure discrimination?
- § When might the market solve the problem of discrimination? When might it not?

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**U.S. Median Weekly Earnings, Selected Occupations, 2006**

Occupation	Both sexes	Men	Women	Gender gap
Chief executives	\$1,875	\$1,907	\$1,422	34.1%
Aircraft pilots	1,407	1,419	<i>n.e.d.</i>	
Educ. administrators	1,125	1,275	1017	25.4%
Fire fighters	912	918	<i>n.e.d.</i>	
Registered nurses	978	1,074	971	10.6%
Social workers	732	749	728	2.9%
Secretaries	583	559	584	- 4.3%
Telemarketers	395	<i>n.e.d.</i>	<i>n.e.d.</i>	
Waiters/waitresses	363	401	348	15.2%
Maids/housekeeping	355	404	348	16.1%

*n.e.d.* = not enough data for BLS disclosure requirements

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## Introduction

§ In competitive markets, the wages workers earn equal

§ There are many factors that affect productivity and wages...

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## Compensating Differentials

§ **Compensating differential:**

§ These characteristics include

Examples:

§ Coal miners and fire fighters are paid more than other workers with similar education to compensate them for the extra risks.

§ Night shift workers paid more than day shift to compensate for the lifestyle disruption of working at night.

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## Ability, Effort, and Chance

§ Greater ability or effort often command higher pay.

§ Wages also affected by chance

§ *E.g.*, new discoveries no one could have predicted

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### Ability, Effort, and Chance

§ Ability, effort, and chance are difficult to measure, so it is hard to quantify their effects on wages.

§ They are probably important, though, since

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### Case Study: The Benefits of Beauty

Research by Hamermesh and Biddle:

§ People deemed more attractive than average earn 5% more than people of average looks.

§ Average-looking people earn 5-10% more than below-average looking people.

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### Case Study: The Benefits of Beauty

Hypotheses:

1.

§ In jobs where appearance is important, attractive workers are more valuable to the firm, command higher pay.

2.

§ People who make an effort to project attractive appearance may be smarter or more competent in other ways.

3.

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### The Superstar Phenomenon

- § Superstars like Will Smith, Bono earn many times more than average in their fields.
- § The best plumbers or carpenters do not.
- § Superstars arise in markets that have two characteristics:

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### Human Capital

§ **Human capital:**

§ Human capital

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### Weekly Earnings of Full-Time Employed Persons Age 25+ by Education, 2007:Q4

<i>Educational attainment</i>	<i>Median weekly earnings</i>
Less than H.S.	\$ 424
H.S. diploma	610
Some college or Associate degree	697
Bachelor's degree	994
Advanced degree	1,259

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## The Increasing Value of Skills



The earnings gap between college-educated and non-college-educated workers has widened in recent decades.

Percentage difference in annual earnings for college graduates vs. high school diploma		
	1980	2005
Men	44%	87%
Women	35%	72%

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## The Increasing Value of Skills

Two hypotheses:

1. Rising exports of goods made with skilled labor, rising imports of goods made with unskilled labor.
2. New technologies have increased demand for

Difficult to determine which hypothesis better explains the widening earnings gap; probably both are important.

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### ACTIVE LEARNING 1 Discussion question

Suppose you were offered this choice:

- A. Spend 4 years studying at the world's best university, but must keep your attendance there a secret.
- B. Get an official degree from the world's best university, but cannot actually study there.

Which do you think would enhance your future earnings more?

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## The Signaling Theory of Education

An alternative view of education:

§ Policy implication: Increasing general educational attainment would not affect wages.

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## Reasons for Above-Equilibrium Wages

1.

2. *Unions*

**Union:** a worker association that bargains with employers over wages and working conditions

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## Reasons for Above-Equilibrium Wages

3. *Efficiency wages*

**Efficiency wages:**

Firms may pay higher wages to reduce turnover, increase worker effort, or attract higher-quality job applicants.

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ACTIVE LEARNING 2  
**Explaining wage differentials**

In each case, identify which worker would earn more and explain why.

- A. The best physical therapist on the planet or the best writer on the planet
- B. A trucker that hauls produce or a trucker that hauls hazardous waste from nuclear power plants
- C. A graduate of an Ivy League college or an equally intelligent & capable graduate of a state university
- D. Someone who graduated from a state university with a 3.7 GPA, or someone who graduated from the same university with a 2.4 GPA

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ACTIVE LEARNING 2  
**Answers**

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**The Economics of Discrimination**

§ **Discrimination:**

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### Measuring Labor-Market Discrimination

- § Median earnings of full-time U.S. workers, 2007:
  - § White males earn 21% more than white females.
  - § White males earn 24% more than black males.
- § Taken at face value,
  
- § But there are many possible explanations for

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### Measuring Labor-Market Discrimination

- Differences in human capital among groups:
- § White males 75% more likely to have college degree than black males
  - § White males 11% more likely to have graduate degree than white females
  - § Women have less on-the-job experience than men
  - § Public schools in many predominantly black areas are of lower quality (e.g., funding, class sizes)
- There may well be discrimination in access to education, but this problem occurs long before workers enter the labor force.

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### Measuring Labor-Market Discrimination

- Recent study by Bertrand and Mullainathan finds evidence of labor-market discrimination:
- § 5000 fake résumés sent in response to “help wanted” ads.
  - § Half had names more common among blacks, like Lakisha Washington or Jamal Jones. The other half had names common among whites, like Emily Walsh or Greg Baker. Otherwise, the résumés were the same.
  - § The white names received 50% more calls from interested employers than the black names.

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### Discrimination by Employers

§ Competitive markets provide a natural remedy for employer discrimination:

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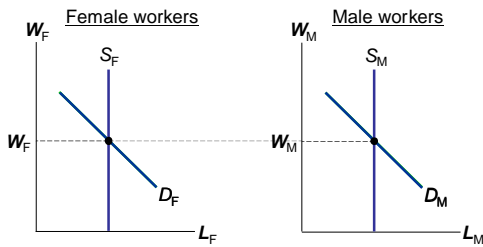
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### Discrimination by Employers



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### Discrimination by Consumers

§ Discrimination by consumers may result in

§ Suppose firms care only about maximizing profits, but customers prefer being served by whites.

§ Then firms have an incentive to hire white workers, even if non-whites are willing to work for lower wages.

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## Discrimination by Governments

- § Some government policies mandate discriminatory practices.
  - § apartheid in South Africa before 1994
  - § early 20<sup>th</sup> century U.S. laws requiring segregation in buses and streetcars
- § Such policies prevent the market from correcting discriminatory wage differentials.

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## CONCLUSION

- § In competitive markets, workers are paid a wage that equals the value of their marginal products.
- § Many factors affect the value of marginal products and equilibrium wages.
- § The profit motive can correct discrimination by employers, but not discrimination by customers or discriminatory policies of governments.
- § Even without discrimination, the distribution of income may not be equitable or desirable – a topic we explore in the following chapter.

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