

19 Earnings and Discrimination

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PowerPoint® Slides
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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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Introduction

- In Canada today, the physician earns on average \$200 000 per year, the police officer about \$50 000 and the typical farm worker about \$20 000.
- These variations are explained by labour supply and labour demand.
- labour demand reflects the marginal productivity of labour.
- In equilibrium, the wages workers earn equal the value of their marginal contribution to the economy's production.
- There are many factors that affect productivity and wages...

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Compensating Differentials

- **Compensating differential:** a difference in wages that arises to offset the nonmonetary characteristics of different jobs
- These characteristics include unpleasantness, difficulty, safety. 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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Human Capital

- **Human capital:** the accumulation of investments in people, such as education and on-the-job training
- Human capital affects productivity, and thus labor demand and wages.
- On average, people with more human capital earn more than those with less human capital.
- In Canada, university graduates earn on average 45 percent more than those with only a high-school diploma.

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Ability, Effort, and Chance

- Greater ability or effort often command higher pay, as these increase workers' marginal products, make them more valuable to the firm.
- Wages also affected by chance
 - e.g., new discoveries that no one could have predicted make some occupations obsolete, increase demand in others

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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 easily measurable characteristics (education, age, etc.) account for less than half of the variation in wages in our economy.

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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:

- Good looks matter for productivity
 - In jobs where appearance is important, attractive workers are more valuable to the firm, command higher pay.
- Good looks indirectly related to ability
 - People who make an effort to project attractive appearance may be smarter or more competent in other ways.
- Discrimination

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The Signaling Theory of Education

An alternative view of education:

- Firms use education level to sort between high-ability and low-ability workers.
- The difficulty of earning a college degree demonstrates to prospective employers that college graduates are highly capable.
- Yet, the education itself has no impact on productivity or skills.
- Policy implication: Increasing general educational attainment would not affect wages.

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The Superstar Phenomenon

- Superstars like Sarah McLachlan and Mats Sudin (Maple Leafs) earn many times more than average in their fields.
- The best plumbers or carpenters do not.
- Superstars arise in markets that have two characteristics:
 - Every customer in the market wants to enjoy the good supplied by the best producer.
 - The good is produced with a technology that allows the best producer to supply every customer at a low cost.

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ACTIVE LEARNING 1: Discussion question

Suppose you were offered this choice:

- A. You could spend 4 years studying at the world's best university, but you would have to keep your attendance there a secret.
- B. You could be awarded an official degree from the world's best university, but you couldn't actually study there.

Which do you think would enhance your future earnings more?

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Reasons for Above-Equilibrium Wages

1. Minimum wage laws

The minimum wage may exceed the eq'm wage of the least-skilled and experienced workers

2. Unions

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

Unions use their market power to obtain higher wages; most union workers earn 10-20% more than similar nonunion workers.

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Reasons for Above-Equilibrium Wages

3. Efficiency wages

Efficiency wages: above-equilibrium wages paid by firms to increase worker productivity

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 a top college or an equally intelligent & capable graduate from lower ranked university.
- D. Someone who graduated from 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

- A. The best physical therapist on the planet or the best writer on the planet

*The superstar phenomenon:
The best writer can service many more customers than the best physical therapist.*

- B. A trucker that hauls produce or a trucker that hauls hazardous waste from nuclear power plants

*Compensating differentials:
The hazardous waste hauler earns more to compensate for the higher risks.*

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ACTIVE LEARNING 2: Answers

- C. A graduate of a top college or an equally intelligent & capable graduate from lower ranked university

*The signaling theory of education:
Employers assume a graduate from a top university has more ability than grad from a lower ranked 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

*The human capital theory of education:
A higher GPA reflects greater learning, which leads to higher productivity and wages.*

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The Economics of Discrimination

- **Discrimination:** the offering of different opportunities to similar individuals who differ only by race, ethnicity, gender, or other personal characteristics

Measuring Labour-Market Discrimination

- Women who are members of ethnic minorities receive lower wages than white women.
- Men who are members of ethnic minorities are paid less than white men.
- Aboriginal people living off reserves receive about 10 percent less than non-Aboriginal people.
- Taken at face value, these differences look like evidence that employers discriminate.
- But there are many possible explanations for wage differences besides discrimination; the data above do not control for differences in other factors that affect wages.

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Measuring Labour-Market Discrimination

Differences in human capital among groups:

- The proportion of white males and females differs substantially across various groups.
- A greater proportion of males than females have a college/university education.
- "Pre-market differences"
- Women have on average less job experience than men.
- Differences in compensating differentials whereby women opt for jobs with more flexible hours which sometimes pay less.

In the end, it is difficult to quantify the extent of discrimination in the labour market.

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Discrimination by Employers

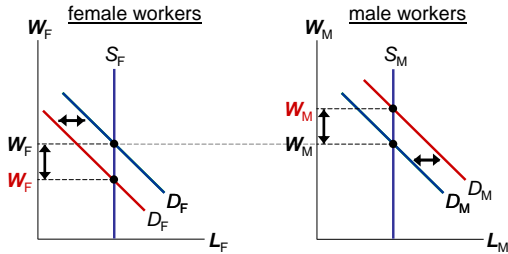
- If one group in society receives a lower wage than another group, even after controlling for human capital and job characteristics, who is to blame for the differential?
- Competitive markets provide a natural remedy for employer discrimination: T
 - The remedy = The profit motive.
- Supply and demand will eliminate the wage gap caused by discrimination.

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Discrimination by Employers

Suppose discriminating firms with the goal of hiring female workers. When the female-to-male wage ratio is unequalized, which attract entry of other non-discriminating firms. Result: a wage differential.



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TABLE 19.1: Ratio of Female-to-Male Wages by Occupation, 1997 and 2006

Occupation	1997	2006
All occupations	80.7	84.0
Management	77.3	84.4
Clerical	92.0	95.8
Sciences	85.0	86.0
Teachers	88.7	88.1
Sales	76.6	78.3
Construction	84.0	63.1

Source: Statistics Canada, The Canadian Labour Force Survey, "Average Hourly Wages, All Employees," Table 3701, various series.

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TABLE 19.2: Fraction of the Female-to-Male Wage Gap Explained by Various Factors

Factors Explaining Gap	Fraction of Gap Explained
Education	4.5
FYFTE*	10.1
Tenure	2.8
Age of youngest family member	0.7
Marital status	0.8
Part-time status	3.6
Region	0.0
Urban size	-0.6
Union status	0.8
Firm size	0.9
Duties	4.3
Influence on budget and staffing decisions	1.3
Industry	11.2
Occupation	8.6
Total explained	49.0
Total unexplained	51.0

*FYFTE is full-year, full-time equivalent experience.

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Discrimination by Customers and Government

- There are limits to the corrective abilities of market forces to eliminate discriminatory wage differentials.
 - Customer preferences
 - Government policies
- Discrimination by consumers may result in discriminatory wage differentials.
- Governments have been known at times to mandate discriminatory practices. (e.g., during apartheid in South Africa).
 - Such policies prevent the market from correcting discriminatory wage differentials.

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Discrimination by Customers and Government

- Wage differentials persist in competitive markets only when customers are willing to pay to maintain the discriminatory practice or when the government mandates it.

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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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CHAPTER SUMMARY

- Other things equal, wage differences compensate workers for job attributes: The harder or less pleasant a job, the more a worker is compensated.
- Workers with more human capital are more productive and command higher wages than workers with less human capital.
- Workers with college degrees may get better job offers because the degree signals high natural ability to employers.

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CHAPTER SUMMARY

- Wages also may differ with natural ability, effort, and chance.
- Wages are sometimes pushed above their equilibrium levels, due to minimum wage laws, the market power of labor unions, and efficiency wages.
- Some differences in earnings are due to discrimination on the basis of race or other characteristics. Measuring the amount of discrimination is difficult, though.

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CHAPTER SUMMARY

- The profit motive tends to limit the impact of employer discrimination on wages.
- Discrimination by consumers or governments may lead to persisting wage differentials.

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End: Chapter 19

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