



Labor Markets and Labor Unions

Labor Supply

Unions and Collective Bargaining

Union Wages and Employment

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1



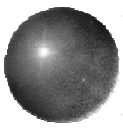
Labor Supply

- ⊕ **A resource supplier has a labor supply curve for each possible uses of his labor**

- ⊕ **To some markets, the quantity supplied is zero over the realistic range of wages**
 - ⊗ **Ex: 高危險性,犯法**

- ⊕ **An person's labor supply to each market depends on**
 - ⊗ **Ability**
 - ⊗ **taste for the job**
 - ⊗ **opportunity cost of their time,**
Let wages in other markets remain constant

2

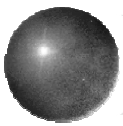


Utility Maximization

- ⊕ **Two sources of utility are considered**
 - ⊞ **The consumption of goods and services**
 - serves as the basis for consumer demand
 - ⊞ **The enjoyment of leisure**
 - A normal good
 - subject to the law of diminishing marginal utility

Related to a scarce resource: Time

3



Three Uses of Time

- ⊕ **Individuals can use their time in following three ways**
 - ⊞ **Undertake market work → selling time in the labor market for income**
 - ⊞ **Undertake nonmarket work → Produce their own goods and services**
 - Ex: Laundry, education
 - ⊞ **Spend time as leisure → all nonwork uses of their time**

4

Work and Utility

- ⊕ Work is not a pure source of utility,
 - ⊗ A source of *disutility* → the opposite of utility
- ⊕ Work is subject to increasing marginal disutility →
 - ⊗ more works → greater the marginal disutility of working another hour
- ⊕ Net utility of work
 - ⊗ Utility of consumption made possible by work – disutility of the work itself
 - ⊗ makes some amount of work an attractive use of an individual's time

5

Utility Maximization

- ⊕ Limits of time: one balance his time among
 - ⊗ market work,
 - ⊗ nonmarket work
 - ⊗ leisureto maximize utility
- ⊕ Rational consumer maximize utility:
 $MU_{MW} = MU_{NMW} = MU_L$
- ⊕ Comparison: (Spend \$ to max. utility)
 - ⊗ Time → Budget
 - ⊗ $MU_{MW} = MU_{NMW} \dots \rightarrow MU_x/P_x = MU_y/P_y$

6



Some Implications

- ⊕ **The higher your market wage, other things constant,**
 - ⊕ the higher your opportunity cost of leisure and nonmarket work

- ⊕ **The higher the expected earnings right out of high school,**
 - ⊕ the higher the opportunity cost of attending college

7

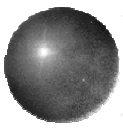


Wages and Individual Labor Supply

- ⊕ **As wage increases,**
 - ⊕ Individual initially increase the quantity of labor supplied
 - ⊕ Eventually reduce the quantity of labor supplied,

- ⊕ **Consider the impact of wage increases on the allocation of time**
 - ⊕ choice between market work and other uses of time
 - Substitution Effect
 - Income Effect

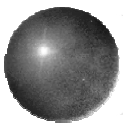
8



Substitution Effect

- ⊕ Higher wage provides an incentive to work more
 - ⊞ Each hour of work now buys more goods and services
- ⊕ As the wage increases, you substitute market work for other activities → substitution effect of a wage increase

9



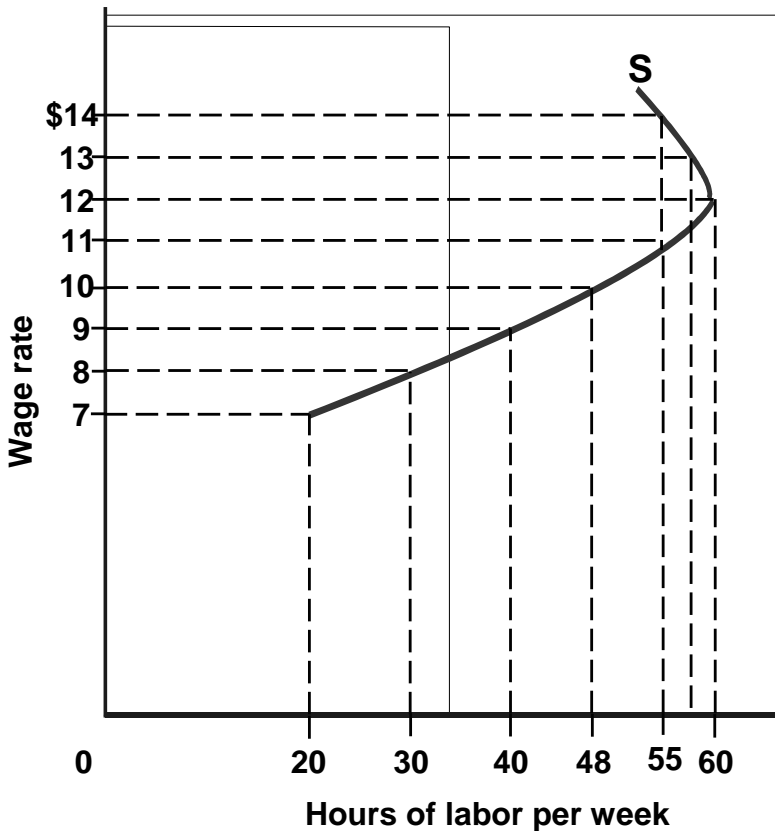
Income Effect

- ⊕ Higher wage
 - ⊞ Higher income for the same working hours
 - ⊞ → Demand for all normal goods increases
- ⊕ Leisure is a normal good,
 - ⊞ Higher income increases the demand for leisure
 - ⊞ → Allocation of time to market work declines
- ⊕ The *income effect of a wage increase* tends to reduce the quantity of labor supplied to market work

See next slide

10

Labor Supply Curve Bends Backward



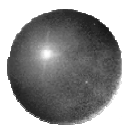
- Wage < 12
 - ❑ slopes upward
 - ❑ Substitution effect dominates
 - ❑ Quantity of labor supplied increases.
- Wage of \$12,
 - ❑ bends backward
 - ❑ Income effect dominates
 - ❑ Quantity of labor supplied decreases.

11

Flexibility of Hours Worked

- ⊕ Previous model assumes that
 - ❑ workers have some control over the time they work
- ⊕ Worker control the working time by
 - ❑ Part time and overtime work
 - ❑ Control over timing and length of vacations
 - ❑ How long a person stays in school and when they retire

12

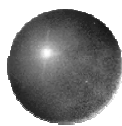


Nonwage Determinants of Labor Supply

- ⊕ **The supply of labor also depends on some factors other than the wage as follows:**
 - ⊗ **Other sources of income**
 - ⊗ **Nonmonetary factors**
 - ⊗ **Value of job experience**
 - ⊗ **Taste for work**

Described as follows:

13



Other Sources of Income

- ⊕ **The willingness to supply labor depends on income on other sources:**
 - ⊗ **Prior savings,**
 - ⊗ **Borrowing,**
 - ⊗ **Family support**

- ⊕ **Generally, wealthy people have less incentive to work**

14



Nonmonetary Factors

- ⊕ **Capital and land can be supplied regardless of the whereabouts of the owner,**
- ⊕ **Labor supplier must be in the same place where the work is performed**

- ⊕ **Individual must be present to supply labor,**
 - ⊗ **Nonmonetary factors become important ... See next slide**

15



Nonmonetary Factors

- ⊕ **Nonmonetary factors**
 - ⊗ **Difficulty of the job**
 - **The more difficult the job, the higher payment**
 - ⊗ **Quality of the work environment**
 - **The more attractive the working conditions, the more labor supply**
 - ⊗ **Status of the position**
 - **the higher the status, the more labor supply**

16



Value of Job Experience

- ⊕ Individual is inclined to take a job that provides valuable experience
- ⊕ Willing to accept relatively low wages
 - ⊗ For the promise of higher wages later
- ⊕ The more a job enhances future earning possibilities, the greater the supply of labor

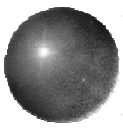
17



Taste for Work

- ⊕ Tastes for work also differ among labor suppliers
 - ⊗ Some prefer physical labor
 - ⊗ Some prefer desk job
- ⊕ Economists argue that
 - ⊗ tastes are relatively stable
 - ⊗ individuals will supply more labor to jobs they like

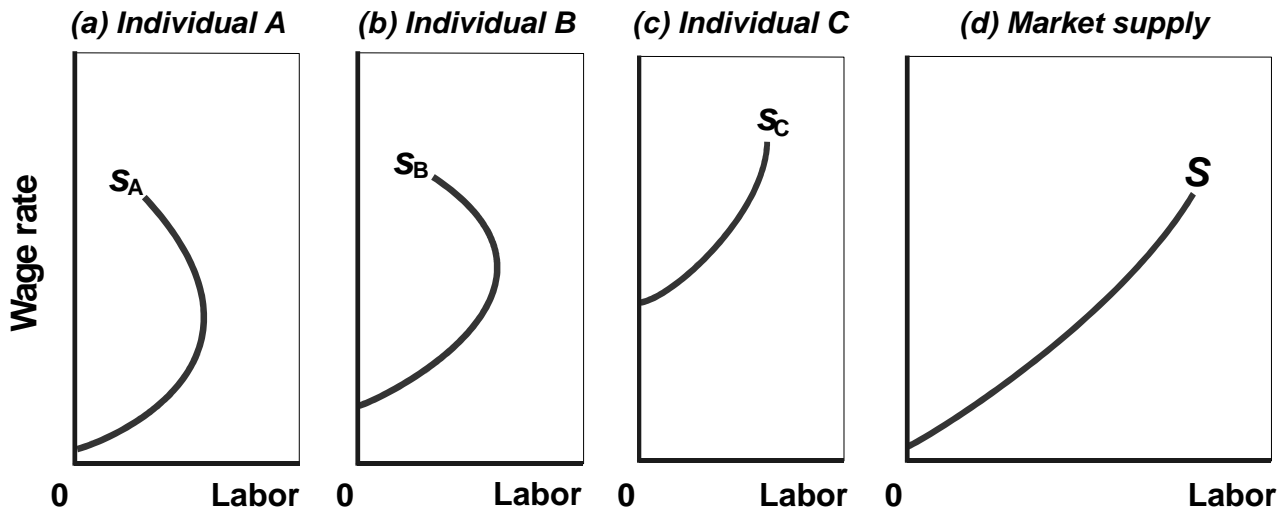
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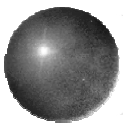
Market Labor Supply Curve

Individual supply curves (horizontal) sum to a market supply curve

Market supply still slopes upward



19



Why Wages Differ

⊕ Wage differences according to the factors:

- ❑ Differences in training, education, age, and experience
- ❑ Differences in ability
- ❑ Differences in risk
- ❑ Geographic differences
- ❑ Job discrimination
- ❑ Union membership

See following slides

20

Training, Education, Age, and Experience

- ⊕ **Long and costly training period**
 - ⊞ → Fewer individuals are willing to incur the time and expense required
 - ⊞ → Smaller market supply
- ⊕ **Extensive training increases the productivity**
 - ⊞ → increased demand for these skills
- ⊕ **Next slide shows how education and experience (age) affect earnings**

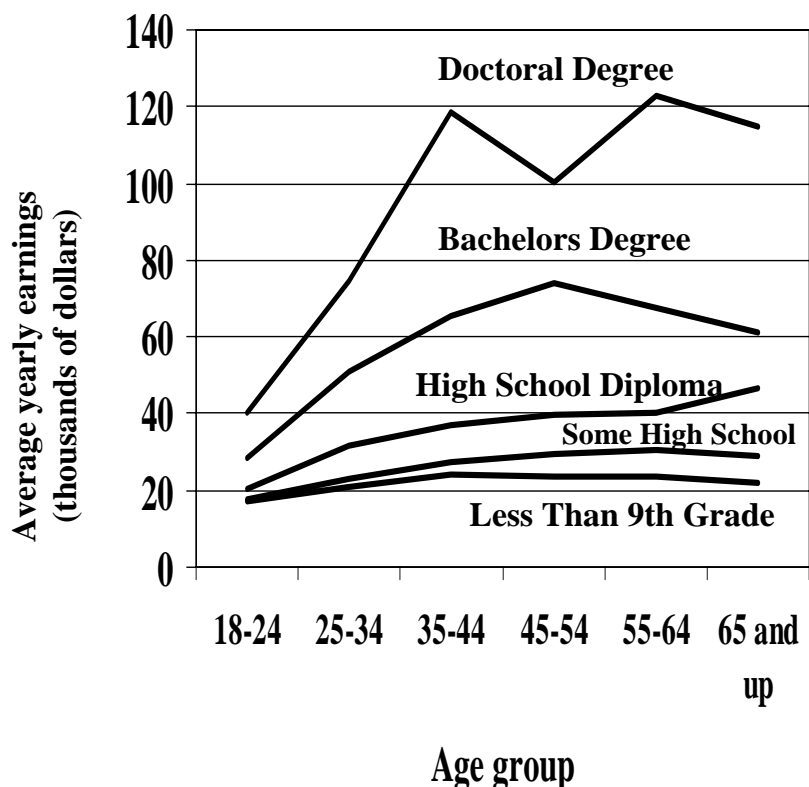
21

Age and Education

At every age, those with more education earn more.

Earnings tend to increase as workers acquire job experience and get promoted.

The pay boost with experience is greater for more educated workers.



22

Differences in Ability

- ⊕ Individuals that are more able and talent earn more than others
- ⊕ Ex: lawyers, executives, professional athletes,
 - ❑ pay differences often reflect differing abilities

23

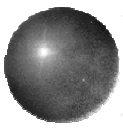
封面故事--個人年收入排行榜 (文／莊健群 商業週刊)

- 我國和其他各國相同，演藝人員和職業運動員是收入最高的兩個族群，不過，演藝人員和職業運動員也是變化最大的兩個族群，「有本事就能拿高薪，但是沒有保障」是演藝人員和職業運動員的寫照。
- 在商業周刊統計高收入的前二十名當中，藝人占了十二位，運動明星有四位，經理人和官員各只有兩位。在收入分配方面，超過三千萬元的有五位，收入超過二千萬元但不到三千萬元的有四位，收入在一千萬元以上但不足二千萬元的有七位之多，看來明星們的收入受到不景氣的影響並不大。
- 周華健是明星中的明星，估計周華健的全年總收入達到新台幣五千六百三十二萬元，高居明星收入排行榜的榜首，也是唯一收入達到五字頭的明星。

港台藝人收入龍虎榜

排名	姓名	總收入 (億元新台幣)
1	張學友	三·九〇七二
2	周星馳	三·九九二
3	成龍	二·六四〇
4	劉德華	一·九三六
5	黎明	一·二六一九

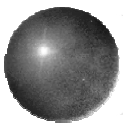
24



Differences in Risk

- ⊕ **Jobs with a high probability of injury pay more, other things constant**
- ⊕ **Workers also earn more in seasonal jobs such as construction, where the risks of unemployment are greater**

25



Geographic Differences

- ⊕ **People want to sell their resources in the market where they earn the most, other things constant**
- ⊕ **They tend to migrate to areas, regions, or countries where the pay is higher**

26

Job Discrimination and Union Membership

- ⊕ **Different wages might due to racial or gender discrimination**
 - ⊗ **glass floor (女性升遷的障礙)**
 - 在公司企業和機關團體中，限制女性晉升到某一職位以上的障礙叫做 **glass ceiling** (這片語相當常見)；據說，之所以使用 **glass**，是因為這障礙有如玻璃般的「無形」-- 看不到。**glass floor** 是 **glass ceiling** 的相等詞，但更狠，它甚至不讓女性有任何的晉升。
- ⊕ **Members of organized labor tend to earn more → Labor union**

27

Overview of Unions

- ⊕ **About 1/7 U.S. workers belongs to a labor union**
- ⊕ **The overwhelming share of union agreements are reached without a strike(罷工)**
- ⊕ **Examine the tools that unions employ to seek higher pay or welfare**

28

紐約罷工勞資雙方仍僵持

(2005-12-22) 【大公網訊】

- 紐約市大眾運輸工會主席杜森星期三下午公開指出，只要資方的大都會運輸署談判中放棄有關退休制度立場，工會隨時可以復工；不過對方也態度強硬地表示，唯有工人回到工作崗位，後續談判才有可能恢復。
- 一九八零年紐約交通大罷工持續十一天，再早的一九六六年罷工了十二天，這一次罷工從二十日凌晨開始，當天進入第二天，沒人敢預料何時結束。
- 杜森下午以記者會方式回應彭博及紐約州長派塔基對罷工事件的反應。他說，如果 MTA 把退休問題放到一邊，工會員工就會回去工作，他們已準備好隨時重回談判桌，但工會絕不拿結束罷工作為談判的條件。
- 雙方在退休問題上的爭議包括，MTA 要求工會新進員工領取全額退休金的年限，從五十五歲提高至六十二歲；MTA 要求勞工在工作前十年期間，從薪資提撥的退休金比例由百分之二提高至百分之六等。
- 杜森與行政首長的關係，就像目前癱瘓的紐約市交通一樣糟。杜森怪罪罷工原因之一在彭博及派塔基不守承諾，彭博則批評杜森自私自利，而派塔基和彭博今天稍早都再度批評罷工是非法行為，同時都聲明，只有運輸工人回去上班後，談判才會恢復。

29

Types of Unions

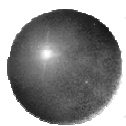
● *Labor union*

- a group of workers who join together to improve their terms of employment

● *Craft unions* (同業工會)

- confined to workers with a particular skill (Ex:律師公會)
- *American Federation of Labor*
 - national organization of craft unions
 - founded in 1886 under Samuel Gompers

30

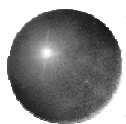


Types of Unions

- ⊕ **The Clayton Act of 1914:**
 - ⊞ Exempted labor unions from antitrust laws
 - ⊞ Unions at competing companies could legally join forces to raise wages

- ⊕ **Unions were also tax exempt**

31



Types of Unions

- ⊕ ***The Congress of Industrial Organizations (CIO)***
 - ⊞ formed in 1935
 - ⊞ National organization of unions
 - ⊞ Mass production industries

- ⊕ **The CIO consists of unions of all workers in a particular industry**

- ⊕ **These *industrial unions* included all types of workers in an industry**

32

Collective Bargaining

- **Collective bargaining**
 - ❑ representatives of union and management negotiate a mutually agreeable contract:
 - wages,
 - employee benefits
 - working conditions

- **Mediator (調停者)**
 - ❑ impartial observer
 - ❑ Listens to both sides separately
 - ❑ Suggests each side to adjust its position to resolve differences
 - ❑ no power to impose a settlement on either party

- **Binding arbitration (仲裁)**
 - ❑ a neutral third party evaluates both sides of the dispute
 - ❑ issues a ruling that both parties must accept

33

醫院勞資糾紛 加拿大新省同意仲裁解決 (大紀元)

- 因為擔心未來可能出現健保工作人員集體辭職的嚴重局面，加拿大新斯高沙省政府昨天作出讓步，同意以仲裁方式解決目前的省內醫院的勞資糾紛。據加通社報導，新斯高沙省省長漢姆昨天發表聲明，指出省政府與代表近九千名健保業雇員工會，將透過由獨立第三方仲裁的方式，商談新的薪資待遇，亦可由獨立的第三方規定勞資雙方的合同條款。
- 新省政府日前通過第六十八號法案，取消了健保業雇員罷工的權利。為表示抗議，省內已有為數不少的護士和健保業雇員決定集體辭職。省長漢姆在昨天的記者會上指出，政府現已決定用仲裁代替第六十八號法案。
- 至於通過這項法案是否是個錯誤，漢姆表示，它畢竟有助於避免罷工和保護病人。他又稱仲裁「對雙方來說，都是合理的折衷辦法。」漢姆還承諾說，將在未來數月內通過新法律，對公務員的合法罷工進行管理。曾在政府通過六十八號法案時表示強烈憤怒的工會成員，昨天對漢姆省長發表的聲明反應熱烈，認為這是工會的重大勝利。新斯高沙公務員工會主席傑森慕亦激動地表示「今天我們在慶祝勝利」。

34



The Strike

- ⊕ **A major source of union power**
 - ⊗ threat of a *strike*

- ⊕ **Strike**
 - ⊗ stop production,
 - ⊗ force the firm to accept the union's position
 - ⊗ Also impose significant costs on union members

35



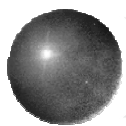
Union Wages and Employment

- ⊕ **Union desires**
 - ⊗ higher wages,
 - ⊗ more benefits,
 - ⊗ greater job security,
 - ⊗ better working conditions

- ⊕ **To keep the analysis easy, consider three following ways a union can increase wages**
 - ⊗ Forming an inclusive, or industrial union
 - ⊗ Forming an exclusive, or craft union
 - ⊗ Increasing the demand for union labor

See later slides.

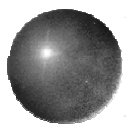
36



Inclusive, or Industrial Unions

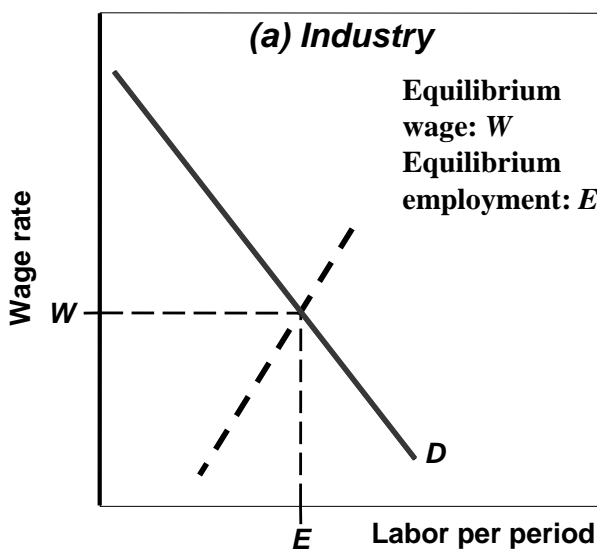
- ⊕ The union tries to negotiate an industry-wide wage for each class of labor
- ⊕ Next slide shows the market demand and supply for a particular type of labor

37

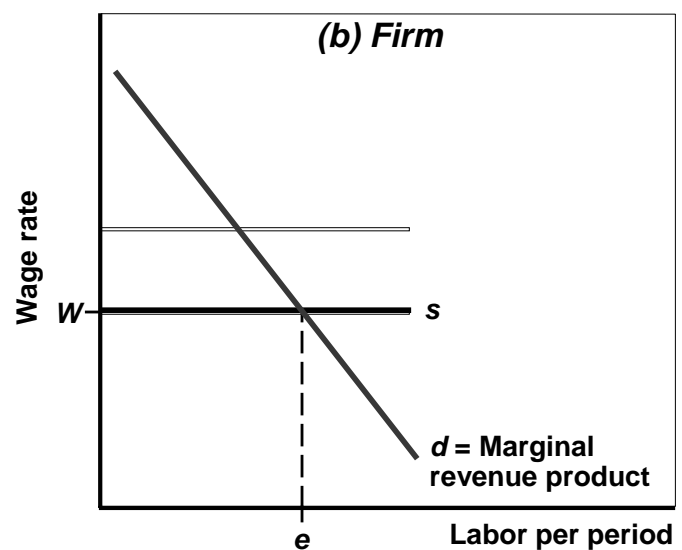


Effect of a Union's Wage Floor

Individual employer faces a horizontal, or perfectly elastic supply of labor depicted by s .



Firm hires up to $MRP=MRC=W$



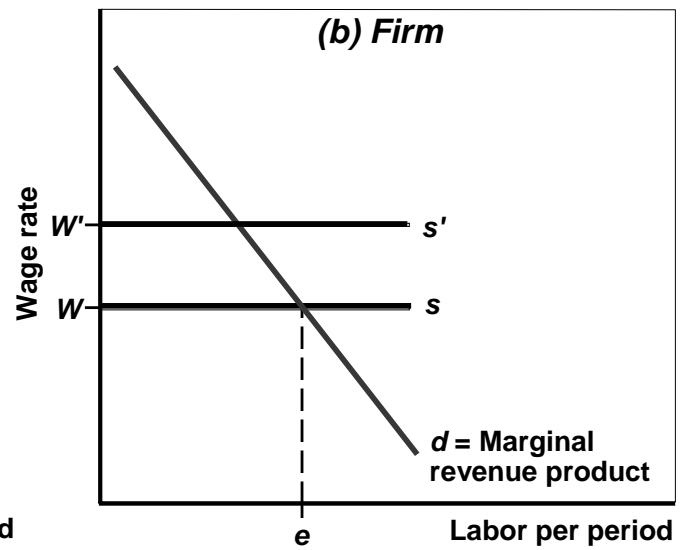
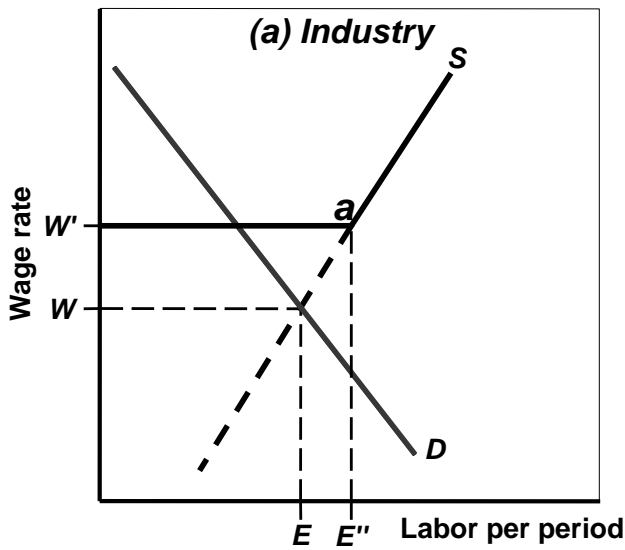
38

Effect of a Union's Wage Floor

The union negotiates a wage $W' > W \rightarrow$ no labor will be supplied at a lower wage.

Supply curve: $W' a S$

kink where the wage floor joins the upward-sloping portion of the original supply curve.

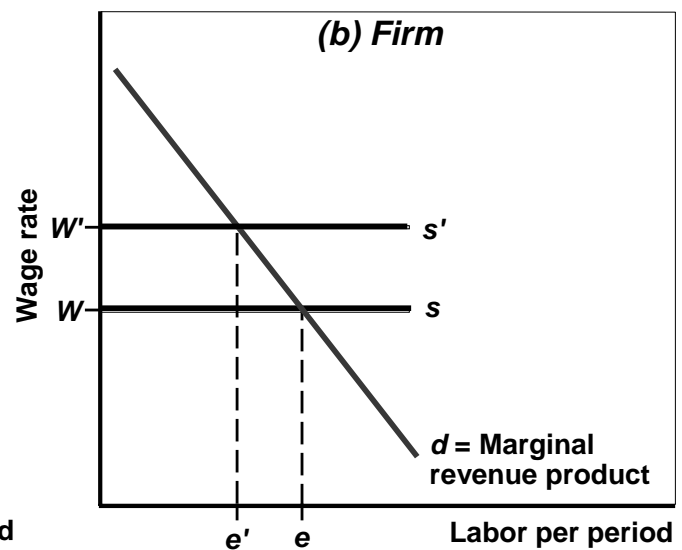
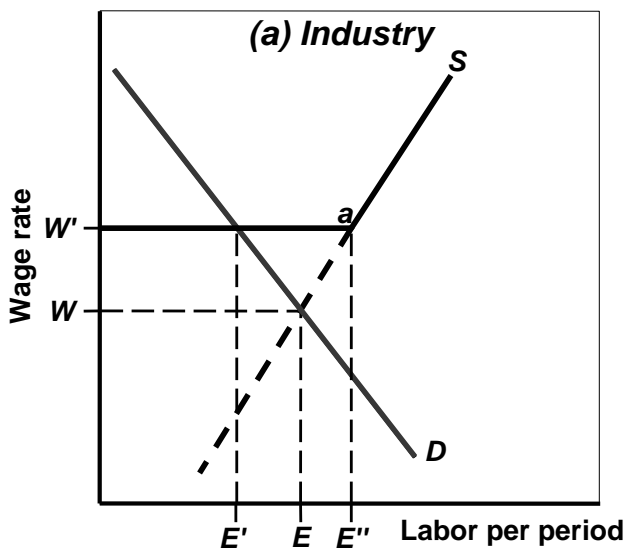


39

Effect of a Union's Wage Floor

Wage floor has been established ($W \rightarrow W'$)

Since the wage is now higher, the quantity of labor demanded declines from e to e'



The higher wage leads to a reduction in total employment
decline from E to E'

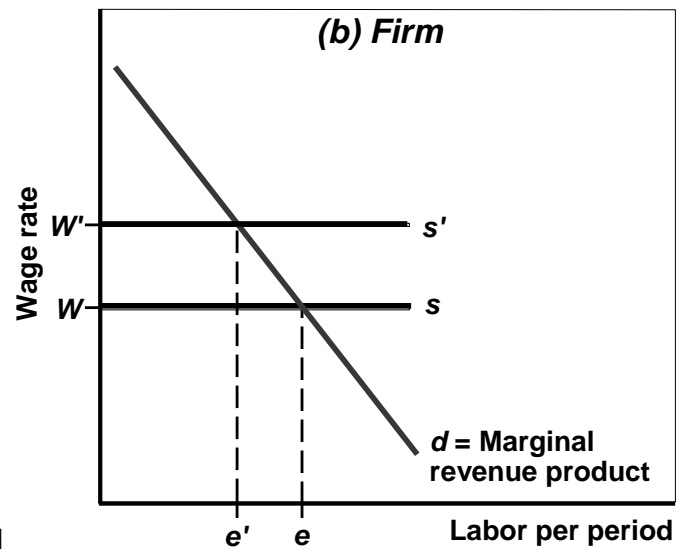
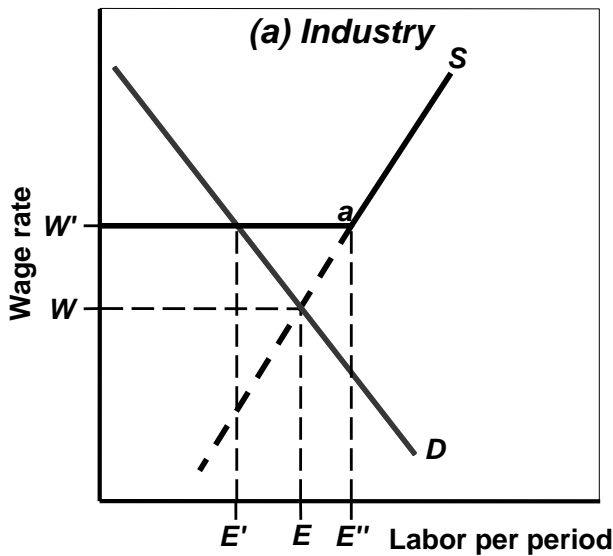
40

Effect of a Union's Wage Floor

At wage W' , excess labor supply: $E'' - E'$

Without union, excess labor supplied \rightarrow unemployment \rightarrow Low wage

With the union \rightarrow individual workers cannot offer to work for less, nor can employers hire them at a lower wage.



Union must somehow ration available jobs,

Such as awarding jobs based on worker seniority or connections within the union.

41

Effect of Union Wage Floor

- ⊕ With the inclusive, or industrial union,
 - ❑ the wage rate is higher
 - ❑ total employment lower than would be in the absence of a union
- ⊕ Those who cannot find union employment will look for jobs in the nonunion sector
 - ❑ the nonunion wage will be driven downward

42



Effect of Union Wage Floor

- ⊕ **Wages are relatively higher in the union sector for two reasons**
 - ❖ **First, because unions bargain for a higher wage**
 - ❖ **Second, excess labor supply crowd into the nonunion sector**

- ⊕ **Unions are most successful at raising wages in less-competitive industries**

43

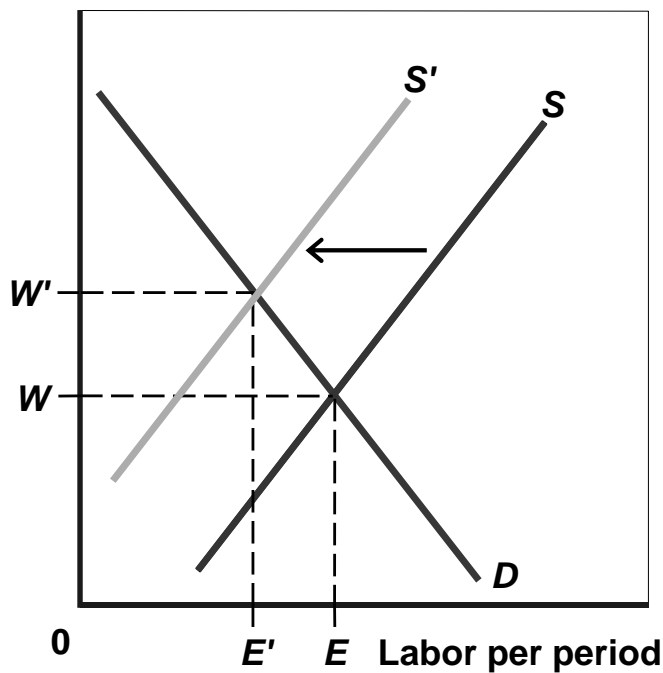


Exclusive, or Craft, Unions

- ⊕ **To increase wages while avoiding excess labor supplied**
 - ❖ **Union may reduce the supply of labor**
- ⊕ **Union can**
 - ❖ **limit its membership**
 - ❖ **force all employers hire only union members**
See next slide
- ⊕ **Membership can be restricted**
 - ❖ **high initiation fees,**
 - ❖ **long apprenticeship (學徒,見習) periods,**
 - ❖ **difficult qualification exams,**
 - ❖ **restrictive licensing requirements,**
 - ❖ **devices aimed at slowing down or discouraging new members.**

44

Effect of Reducing Labor Supply



A successful supply restriction would be shown as the leftward shift from S to S' .

45

Exclusive, or Craft Unions

- ⊕ Wage setting → typical for industrial union
- ⊕ Restricting supply → typical of craft unions (Like doctor, lawyer)
- ⊕ Restrictions are usually defended
 - ❑ Protect the public
 - ❑ self-serving attempts to increase wages and incomes

46

超低的錄取率，邁向法治社會的桎梏 (陳長文律師 / 司改雜誌第032期)

- ◆ 年來我國律師考試向採超低錄取率之政策，日前放榜之八十九年度律師考試，仍維持百分之六左右之標準，致大量有志於法律專業之莘莘學子，受此超低錄取率之桎梏，影響我國法治發展。筆者身為法律系教師及執業律師近三十年，面對此一現實不僅感到失望與無奈，更對因名落孫山、囿於傳統觀念而無法挺身為自身合理權益力爭之眾多學生，感覺慚愧，如鯁在喉，不吐不快。
- 歷年來我國律師之錄取比率，最高不過百分之十三，近年則維持在百分之六左右，相較各法治健全、經濟自由以及政治民主之先進國家，此一比率顯屬過份偏低（美國、德國之錄取率平均為百分之七十左右）。對此極端不合理之現象，筆者實百思不得其解。
- 或有論者以律師乃社會之惡、放寬人數將使律師素質下降等似是而非之無稽事由，作為不當限制錄取人數之藉口。然現今社會乃全球性之工商業社會，所有生活皆與法律緊密結合，與過往單純無爭之農業社會大異其趣。如主其事者仍停留在「訟則凶、和為貴」、律師僅為訟棍或異議份子之古老威權思考而限制錄取人數，顯屬昧於現實。至於高額錄取將使律師素質降低，形成惡性競爭之說，更屬無稽。按法律系成為我國大學聯招第一志願已有十年，每年千餘之菁英份子，投入法律學習，經歷至少四年之專業訓練（亦有需念五年及繼續攻讀研究所者），在所有考試科目皆為法律系必修科目，命題人員皆為學校教授之情形下，一名法律系學生既足以完成法律系學業，當具備成為律師之基本素養，今竟以百分之六左右之錄取率，限制渠等取得律師資格，不啻嚴重浪費國家人力資源，且對於其餘百分之九十四之學生而言，亦屬不公剝奪其發揮專業之機會。

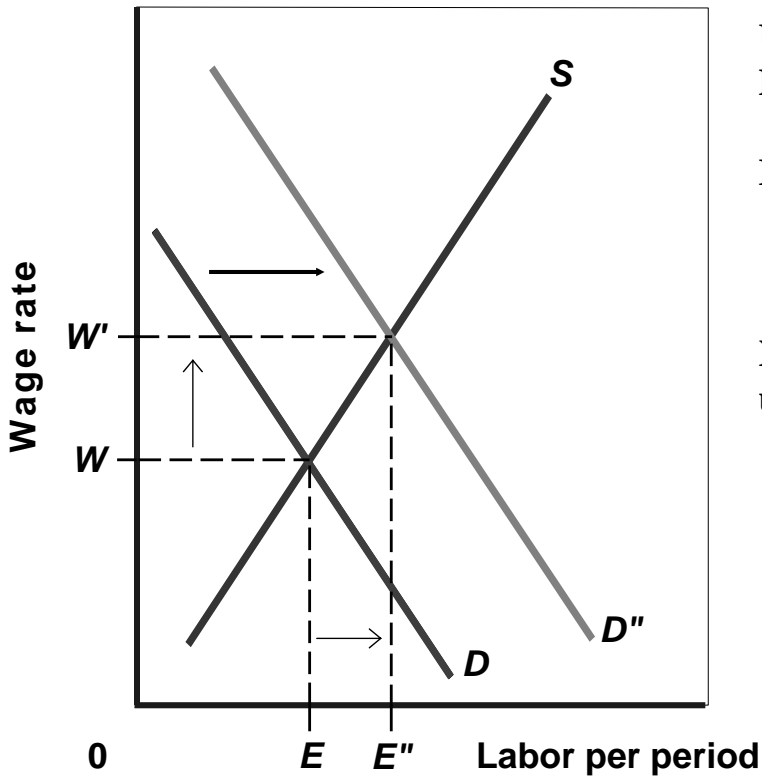
47

Increasing the Demand for Labor

- ◆ **Ways in which unions try to increase the demand for union labor**
 - ❑ **Increase demand for union-made goods**
 - ❑ **Restrict supply of nonunion-made goods**
 - Ex: United Auto Workers restricted the imported cars
 - ❑ **Increase productivity of union labor**
 - Unions increase worker productivity by minimizing conflicts, resolving differences, and monitoring workers
 - Productivity increases → the demand for union labor should increase
 - ❑ **Featherbedding (See later)**
- ◆ **See next slide for the graph**

48

Effect of Increasing Labor Demand



Union increase the demand:
 $D \rightarrow D''$,

More attractive!

Increase employment: $E \rightarrow E''$
Increase wage rate: $W \rightarrow W'$

No need to ration jobs among
union members.

49

Featherbedding

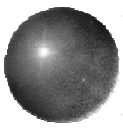
● Featherbedding

- an attempt to ensure that more union labor is hired than producers prefer

● For example,

- each Broadway theater hire permanent "house" carpenters, electrician, and property manager
 - When show run begins, workers appear only on payday

50

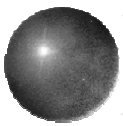


Featherbedding

- ⊕ **Featherbedding**
 - ❏ does not create a true increase in the demand,
 - ❏ it forces firms to hire more labor than they want, thus moving the firm to a point to the right of its true labor demand curve

- ⊕ **The union gives the firm an all-or-none choice,**
 - ❏ Hire the number of workers the union requires, or strike!

51



Recent Trends in Union Membership

- ⊕ **In 1955, about 1/3 of salary workers belonged to unions**
 - ❏ Since then, union membership declined
 - ❏ now only 1/7 belongs to a union

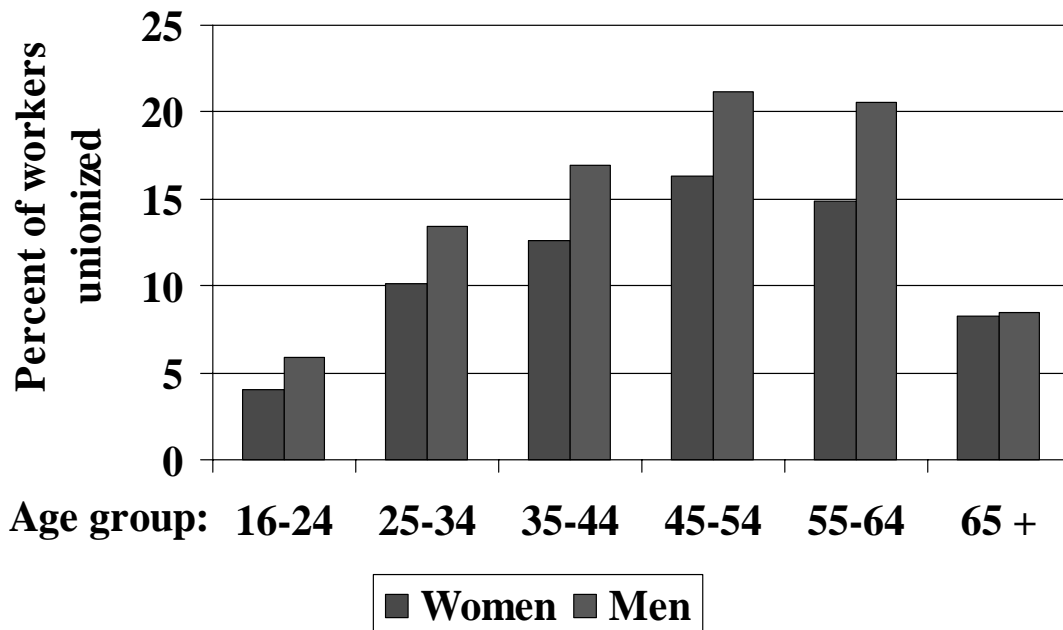
- ⊕ **Government workers make up nearly half of all union members**
 - ❏ Typical union member is a schoolteacher

- ⊕ **See next slide**

52

Unionization Rates

- Rates for men are higher than for women.
 - Many men are in manufacturing
 - Women in the service sector
- The highest membership rates are for middle-aged males

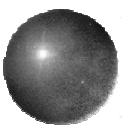


53

Recent Trends in Union Membership

- Union membership rates vary greatly across states
 - Highest in the Northeast US
 - Lowest in the South US
- Decline in union membership is due partly to structural changes in the U.S. economy
 - Employment in the industrial sector has been declining while increasing in the service sector
 - The growth in foreign competition
 - The near disappearance of strikes

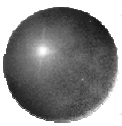
54



課堂報告

- ⊕ 使用 Income effect和substitution effect解釋 labor supply curve 有 bends backward 的現象
- ⊕ 請舉例說明員工可用哪些方式控制其提供勞力的時間
- ⊕ 請介紹 P268, Case study: Winner-Take-All labor market的大意
- ⊕ 請解釋Craft Union 和industrial union之間的不同
- ⊕ 請解釋何謂 **Featherbedding**

55



Homework

- ⊕ 7 Discuss permanent wage different
- ⊕ 13. Compute the market supply of labor
- ⊕ 14. Determine the effect of increasing demand on the industry with industrial union.

56