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Demand for Labor and Market Theory of Wage Determination

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Abstract

This economics is not merely economics but also discusses about many spheres of the labors. Labor economics look out to recognize the dynamics and functions of the markets of labor. The labor market function is by the interaction and dealing of employers and workers. Labor economics tries to understand the result pattern of income, employment and wages by looking at the workers or employs and labor is the measurement of the work that is done by the human beings. Usually, there is dissimilarity in labor economics and other aspects of production such as capital and land. In this article we will discuss about the spheres of this field of economics.

Keywords: Labor; Demand; Determination; Discrimination.

1. Introduction

The study of labor economics seeks to understand the relationship between workers and employers. It's important to society as it determines wages, the causes of discrimination, the impact of migration on employment, and how governments should manage recessions.

2. Labor Economics

Labor economics seeks to understand the functioning and dynamics of the markets for wage labor.

Labor markets or job markets function through the interaction of workers and employers. Labor economics looks at the suppliers of labor services (workers) and the demanders of labor services (employers), and attempts to understand the resulting pattern of wages, employment, and income.

3. Demand for Labor

When producing goods and services, businesses require labor and capital as inputs to their production process. The demand for labor is an economics principle derived from the demand for a firm's output. That is, if demand for a firm's output increases, the firm will demand more labor, thus hiring more staff. And if demand for the firm's output of goods and services decreases, in turn, it will require less labor and its demand for labor will fall, and less staff will be retained.

Labor market factors drive the supply and demand for labor. Those seeking employment will supply their labor in exchange for wages. Businesses demanding labor from workers will pay for their time and skills.

3.1 Breaking down Demand for Labor

Demand for labor is a concept that describes the amount of demand for labor that an economy or firm is willing to employ at a given point in time. This demand may not necessarily be in long-run equilibrium, and is determined by the real wage, firms are willing to pay for this labor and the number of labor workers willing to supply at that wage.

A profit-maximizing entity will command additional units of labor according to the marginal decision rule: If the extra output that is produced by hiring one more unit of labor adds more to total revenue than it adds to the total cost, the firm will increase profit by increasing its use of labor. It will continue to hire more and more labor up to the point that the extra revenue generated by the additional labor no longer exceeds the extra cost of the labor. This relationship is also called the marginal product of labor (MPL) in the economics community.

3.2 Other Considerations in Demand for Labor

According to the law of diminishing marginal returns, by definition, in most sectors, eventually the MPL will decrease. Based on this law: as units of one input are added (with all other inputs held constant) a point will be reached where the resulting additions to output will begin to decrease; that is marginal product will decline.

Another consideration is the marginal revenue product of labor (MRPL), which is the change in revenue that results from employing an additional unit of labor, holding all other inputs constant. This can be used to determine the optimal number of workers to employ at a given market wage rate. According to economic theory, profit-maximizing firms will hire workers up to the point where the marginal revenue product is equal to the wage rate because it is not efficient for a firm to pay its workers more than it will earn in revenues from their labor.

3.3 Common Reasons for a Shift in Labor Demand

Changes in the marginal productivity of labor, such as technological advances brought on by computers

Changes in the prices of other factors of production, including shifts in the relative prices of labor and capital stock

Changes in the price of an entity's output, usually from an entity charging more for their product or service

4. Wage Determination

An explanation of how wages are determined in a perfectly competitive labor market.

A perfectly competitive labor market will have the following features

a) Many firms

b) Perfect information about wages and job conditions.

c) Firms are offering identical jobs

d) Many workers with the same skills

e) Diagram of wage determination

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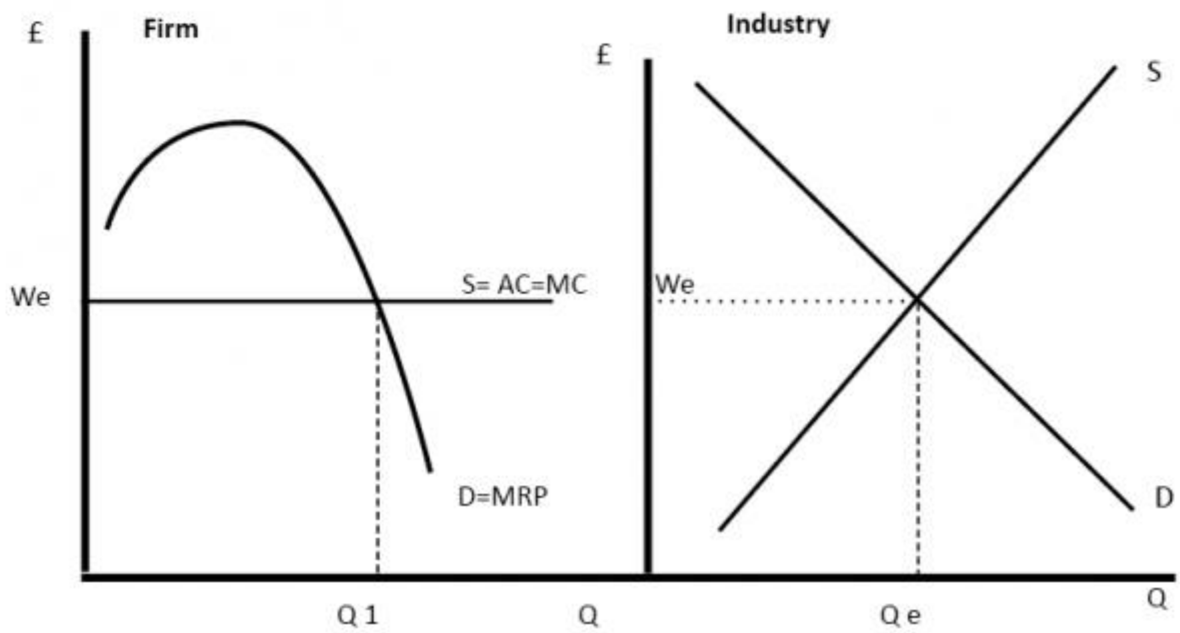


f) The equilibrium wage rate in the industry is set by the meeting point of the industry supply and industry demand curves.

g) In a competitive market, firms are wage takers because if they set lower wages, workers would not accept the wage.

h) Therefore they have to set the equilibrium wage we.

i) Because firms are wage takers, the supply curve of labor is perfectly elastic therefore AC = MC.

j) The firm will maximize profits by employing at Q1 where MRP of Labor = MC of Labor

4.1 Comparing wage of lawyers and McDonalds workers

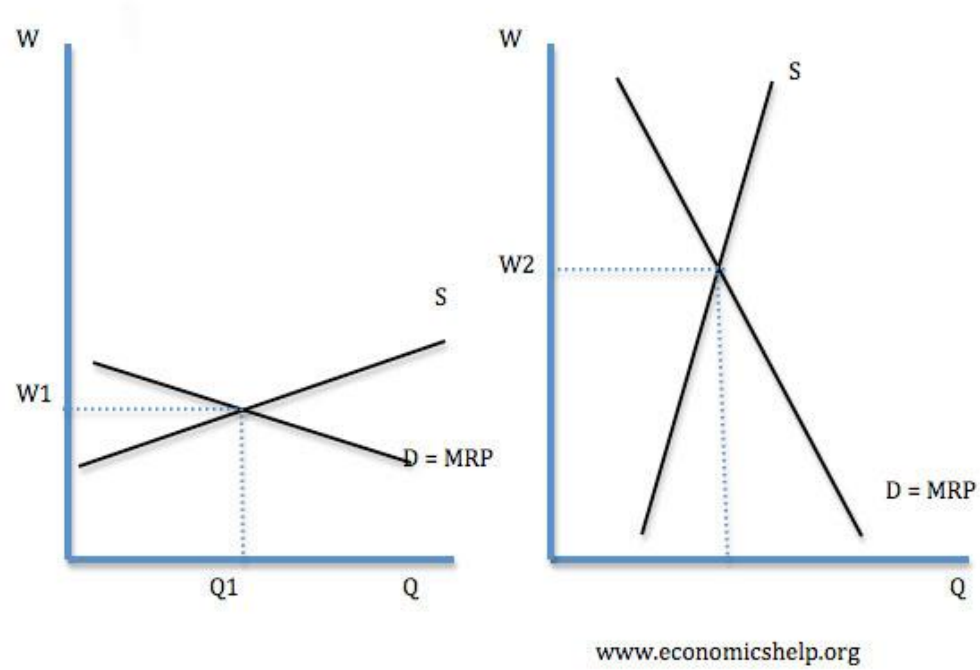
Lawyers get higher pay for two reasons.

1. Supply of lawyers is inelastic because of the qualifications required.
2. The Marginal Revenue Product (MRP) of lawyers is high. If they are successful they can make firms a lot of revenue.

McDonald's workers, however, get lower pay because:

1. Supply of cleaners is elastic because there are many thousands of people who are suitable for working, qualifications are not really required.
2. The MRP of a McDonald's worker is much lower because there is a limited profit to be made from selling Big Macs.

Diagram of wage determination for lawyers and McDonald's workers



The wage rate on the right is higher because supply is more inelastic and demand is higher.

How realistic is the model of perfect competition in labor markets?

1. In practice, it is difficult for workers to shift between employers.
2. There are significant costs and immobility's to moving between jobs.
3. Firms have a degree of monopsony power which enables them to pay wages lower than a competitive equilibrium
4. Existence of unemployment gives firms more monopsony power
5. Some workers have only a limited choice of employer. For example nurses, firemen, train-drivers will face one main employer (monopsony power).

5. Market Theory of Wage Determination

Classical economists argue that wages—the price of labor—are determined (like all prices) by supply and demand. They call this the market theory of wage determination. When workers sell their labor, the price they can charge is influenced by several factors on the supply side and several factors on the demand side. The most basic of these is the number of workers available (supply) and the number of workers needed (demand). In addition, wage levels are shaped by the skill sets workers bring and employers need, as well as the location of the jobs being offered. When the city recently named by Forbes Magazine as the most miserable city in America (we don't want to make them more miserable by naming them; look it up on the Google) advertises for a city planner, it may have to sweeten the pot to attract good talent.

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6. Human Capital

Human capital is the stock of habits, knowledge, social and personality attributes (including creativity) embodied in the ability to perform labor so as to produce economic value.

Human capital is unique and differs from any other capital. It is needed for companies to achieve goals, develop and remain innovative. Companies can invest in human capital for example through education and training enabling improved levels of quality and production.

Human capital theory is closely associated with the study of human resources management as found in the practice of business administration and macroeconomics.

The original idea of human capital can be traced back at least to Adam Smith in the 18th century. The modern theory was popularized by Gary Becker, an economist and Nobel Laureate from the University of Chicago, Jacob Mincer, and Theodore Schultz. As a result of his conceptualization and modeling work using Human Capital as a key factor, the Nobel Prize for Economics, 2018, was awarded (jointly) to Paul Romer who founded the modern innovation-driven approach to understanding economic growth.

6.1 Understanding Human Capital

An organization is often said to only be as good as its people. Directors, employees, and leaders who make up an organization's human capital are critical to its success.

Human capital is typically managed by an organization's human resources (HR) department. This department oversees workforce acquisition, management, and optimization. Its other directives include workforce planning and strategy, recruitment, employee training and development, and reporting and analytics.

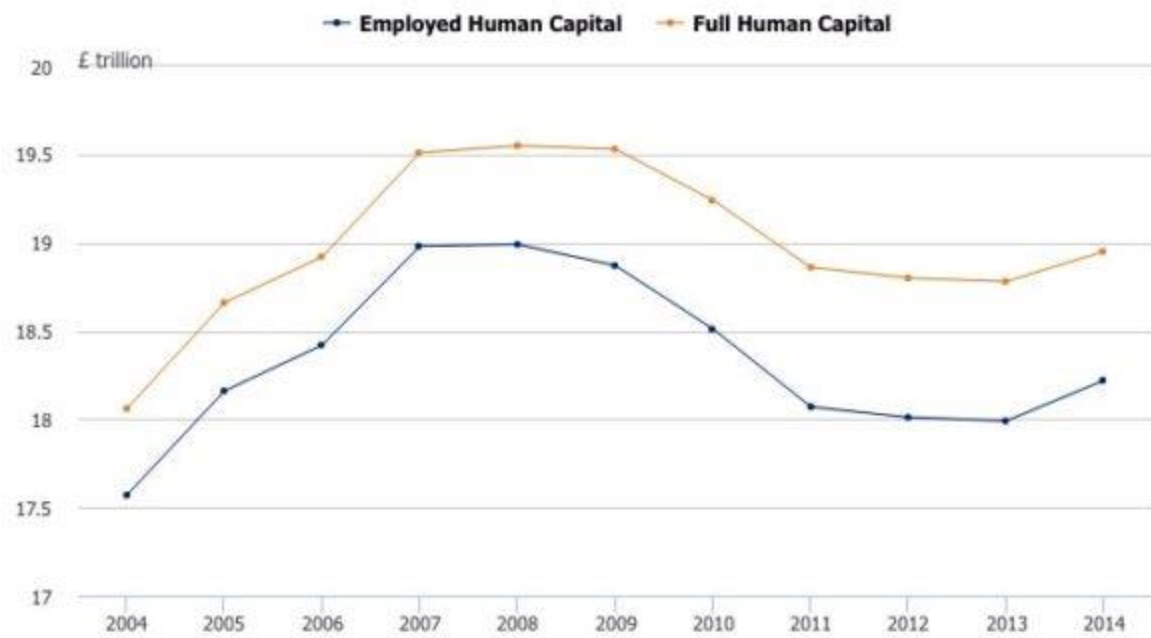
Human capital tends to migrate, especially in global economies. That's why there is often a shift from developing places or rural areas to more developed and urban areas. Some economists have dubbed this a brain drain—making poorer places poorer and richer places richer.

6.2 Measuring Human Capital

For statistical purposes, human capital can be measured in monetary terms as the total potential future earnings of the working age population. (However, this only captures part of human capital and is a limited measure)

Figure 1: Employed and full human capital

UK, 2004 to 2014



Source: Annual Population Survey (APS) - Office for National Statistics

The decline in UK human capital reflects the rise in unemployment and fall in real wages during this period. It should be noted relying on potential earnings is a limited view of human capital. Earnings don't necessarily reflect accurately all aspects of human capital. The OECD consider different ways to measure human capital taking a range of indicators.

Factors that determine human capital

a) Skills and qualifications

b) Education levels

c) Work experience

d) Social skills – communication

e) Intelligence

f) Emotional intelligence

g) Judgement

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h) Personality – hard working, harmonious in an office

i) Habits and personality traits

j) Creativity. Ability to innovate new working practices/products.

k) Fame and brand image of an individual. E.g. celebrities paid to endorse a product.

l) Geography – Social peer pressure of local environment can affect expectations and attitudes.

6.3 Human capital in primary and secondary sector

In agriculture and manufacturing, human capital was easier to measure. The human capital of an assembly line worker could be measured in simple terms of productivity – e.g. the number of widgets produced per hour. In mining, human capital may be strongly related to physical strength and quantity of coal produced per day.

6.4 Human capital in tertiary sector/knowledge economy

The tertiary/service sector has a greater variety of jobs, which require different skills. These skills and qualities are often more difficult to measure regarding output. For example, the human capital of a teacher, cannot be measured by university degree and A-Levels. The best academics may lack some teaching skills – like empathy, the ability to inspire and command a class.

In a job, such as management, important characteristics will be factors such as interpersonal skills, ability to work in a team and the creativity to problem solve.

In other words, as the economy has developed the concept of human capital has also broadened to include a greater variety of skills and traits of capital.

Since the 1960s/70s, human capital has become a more popular economic concept as the emerging ‘economy ‘makes greater use of a wider range of human capital.

7. Labor Market Discrimination

Labor Market Discrimination is another possible reason that might explain wage dispersion.

Discrimination occurs when participants in the marketplace (e.g. employers, employees, customers) take into account such factors as race and sex when making economic exchanges.

More elaborate definition: Discrimination occurs when there are different earnings and employment opportunities across equally skilled workers employed in the same job because of workers’ race, gender, national origin, sexual orientation, age, religion, ‘beauty’ etc.

7.1 Differences

Economists define labor-market discrimination as a situation in which equally materially productive persons are treated unequally on the basis of an observable characteristic.

Equally materially productive: capable of producing the same number and quality of output using the same inputs; distinct from equal dollar productivity

Treated unequally: arriving at a systematically different outcome as a result of the actions of external agents

7.1.1. Inherent group differences

There is no discrimination, and the observed variation in economic outcomes across alternative worker groups reflects differences in their inherent material productivities.

This hypothesis also attributes differences in outcomes to voluntary choices and preferences. Even if is implausible, it is an important starting point for an analysis of discrimination, since not every single group difference results from discrimination.

7.1.2. Discrimination

The differences in economic outcomes observed across different worker group's result from discrimination.

Intergroup differences result in whole or in part from actions taken by consumers, employers, coworkers, and the government.

Different types of discrimination are possible at several points over the course of a worker's lifetime.

7.1.3. Premarket discrimination

Discrimination before the worker enters the labor force Premarket discrimination can affect a worker via low parent health and education, impoverished neighborhoods, and unequal schooling systems.

7.1.4 Market discrimination

Discrimination after the worker enters the labor force Market discrimination may function through prejudice, imperfect information, imperfect competition, and legislation, which may result in two major types of discrimination.

7.1.5 Earnings discrimination

The earnings of equally materially productive workers depend on their group affiliations.

7.1.6 Occupational discrimination

Impediments hinder certain groups of equally materially productive workers from entering particular occupations.

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The effects of premarket and market discrimination are intertwined, especially since the anticipation of future discrimination affects current actions.

Becker (1957) was the first to show that prejudice can be interpreted as a distaste and modeled with microeconomic theory. The rest of this chapter will use his model.

Becker suggested that discrimination could adversely affect minority workers through prejudice by employers, coworkers, and consumers.

7.1.7 Consumer Discrimination

Customer discrimination is a manifestation of personal prejudice of consumers such that they prefer to trade with individuals belonging to a certain group over others. A prevalent fact states that customers do not like being served by minorities or women. For example, a white customer may like to be served by a white worker. This leads to two consequences (i) There is a reduction in the demand for good that are sold by African-American workers and (ii) If the cost of the product is P, the customer acts like he is paying P(1 + d), where Pd is the cost of discrimination.[citation needed] The fact that customer discrimination is still prevalent in the market leads to a number of consequences, one, that it leads to segregation of jobs such that minorities and women are segregated into jobs that do not require a high level of personal contact with customers and two, the decline in the manufacturing industry and a growth in the service sector will only aid in increasing the effects of this discrimination with a growth of jobs requiring face-to-face contact.

7.1.8 Statistical discrimination

Statistical discrimination is said to occur when an employer projects group characteristics upon an individual which leads to him or her being discriminated against in the employment market. In the process of selecting a suitable candidate for a job, the employer has access to only that information which defines the productivity of the individual such as education, training, experience, age etc. These although do play a role, are not perfect measurements of productivity. In such cases, the employer supplements such information with other information that is prominent of the group he or she belongs to, for example, one’s race and sex is easily identifiable from an interview. Thus, the employee may attach the characteristics of his/her race or sex to quantify or guess his productivity. This, thus, is a form of discrimination that arises not because of a deep-rooted personal prejudice that an employer holds against a prospective employee. Consider an example to illustrate this: Women, on an average, tend to have a shorter career life than males do and thus, even if they possess equal qualification as men, they tend to be less valuable to the company. Now, a career minded woman with equal qualifications as a man may be disadvantaged when applying for a job, because the employer may take into consideration the prevalent characteristics of the average women when comparing the two applications. Hence, the career minded woman is discriminated against. Statistical discrimination leads to a systematic preference of a worker over other individuals with the same characteristics, and leads to a situation where women or minorities equal to their counterparts in qualifications are paid less. The manifestation of the stigma is not due to personal preference but it has the same effects as if prejudice was present.

8. Conclusion

Labor Economics is concerned with many of the important decisions facing individuals at various different points in their lives, despite some of these decisions being made when the person is not actively involved in the labor market. Hats why its importance has no bound.

Reference

1. https://www.economicshelp.org/blog/26076/economics/human-capital-definition-and-importance/
2. https://www.investopedia.com/terms/h/humancapital.asp
3. https://en.wikipedia.org/wiki/Human_capital
4. http://whystudyeconomics.ac.uk/during-your-study/module-choices/labour-economics/
5. Varian, Hal. 1992, *Microeconomic Analysis*, 3rd Ed., W.W. Norton & Company, Inc. New York.
6. http://scholar.harvard.edu/files/goldin/files/human_capital_handbook_of_cliometrics_0.pdf

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