

Chapter 14

Labor Markets and Income

Introduction to Labor Markets and Income

In a market economy like the United States, income comes from ownership of the means of production: resources or assets. More precisely, one's income is a function of two things: the quantity of each resource one owns, and the value society places on those resources. Recall from the chapter on Production, Costs, and Industry Structure, each factor of production has an associated factor payment. For the majority of us, the most important resource we own is our labor. Thus, most of our income is wages, salaries, commissions, tips and other types of labor income. Your labor income depends on how many hours you work and the wage rate an employer will pay you for those hours. At the same time, some people own real estate, which they can either use themselves or rent out to other users. Some people have financial assets like bank accounts, stocks and bonds, for which they earn interest, dividends or some other form of income.

Each of these factor payments, like wages for labor and interest for financial capital, is determined in their respective factor markets. For the rest of this chapter, we will focus on labor markets, but other factor markets operate similarly. Later in Chapter 17 we will describe how this works for financial capital.

14.1 The Theory of Labor Markets

The labor market, like all markets, has a demand and a supply. Why do firms demand labor? Why is an employer willing to pay you for your labor? It's not because the employer likes you or is socially conscious. Rather, it's because your labor is worth something to the employer--your work brings in revenues to the firm. How much is an employer willing to pay? That depends on the skills and experience you bring to the firm.

If a firm wants to maximize profits, it will never pay more (in terms of wages and benefits) for a worker than the value of their marginal productivity to the firm. We call this the **first rule of labor markets**.

Suppose a worker can produce two widgets per hour and the firm can sell each widget for \$4 each. Then the worker is generating \$8 per hour in revenues to the firm, and a profit-maximizing employer will pay the worker up to, but no more than, \$8 per hour, because that is what the worker is worth to the firm.

Recall the definition of marginal product. Marginal product is the additional output a firm can produce by adding one more worker to the production process. Since employers often hire labor by the hour, we'll define marginal product as the additional output the firm produces by adding one more worker hour to the production process. In this chapter, we assume that workers in a particular labor market are homogeneous—they have the same background,

experience and skills and they put in the same amount of effort. Thus, marginal product depends on the capital and technology with which workers have to work.

A typist can type more pages per hour with an electric typewriter than a manual typewriter, and the typist can type even more pages per hour with a personal computer and word processing software. A ditch digger can dig more cubic feet of dirt in an hour with a backhoe than with a shovel.

Thus, we can define the demand for labor as the marginal product of labor times the value of that output to the firm.

# Workers (L)	1	2	3	4
MP_L	4	3	2	1

Table 14.1 Marginal Product of Labor

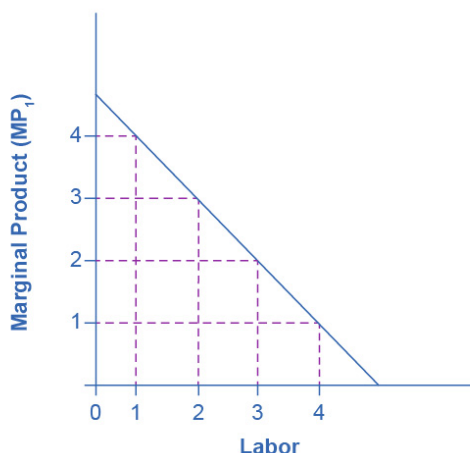


Figure 14.2 Marginal Product of Labor Because of fixed capital, the marginal product of labor declines as the employer hires additional workers.

On what does the value of each worker's marginal product depend? If we assume that the employer sells its output in a perfectly competitive market, the value of each worker's output will be the market price of the product. Thus,

Demand for Labor = $MP_L \times P$ = Value of the Marginal Product of Labor

We show this in Table 14.2, which is an expanded version of Table 14.1

# Workers (L)	1	2	3	4
MP_L	4	3	2	1
Price of Output	\$4	\$4	\$4	\$4

VMP _L	\$16	\$12	\$8	\$4
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Table 14.2 Value of the Marginal Product of Labor

Note that the value of each additional worker is less than the value of the ones who came before.

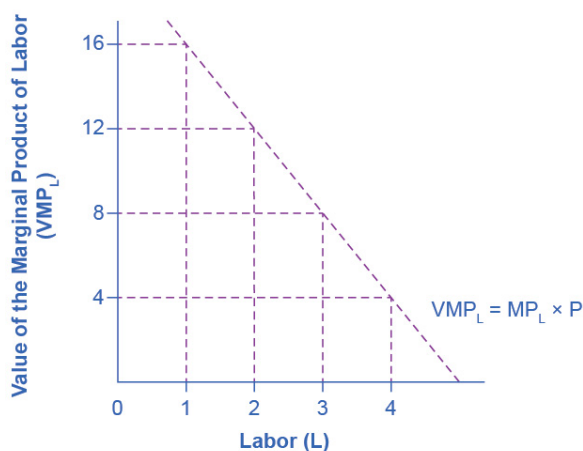


Figure 14.3 Value of the Marginal Product of Labor For firms operating in a competitive output market, the value of additional output sold is the price the firms receive for the output. Since MP_L declines with additional labor employed, while that marginal product is worth the market price, the value of the marginal product declines as employment increases.

Demand for Labor in Perfectly Competitive Output Markets

The question for any firm is how much labor to hire. We can define a **Perfectly Competitive Labor Market** as one where firms can hire all the labor they want at the going market wage. Think about secretaries in a large city. Employers who need secretaries can probably hire as many as they need if they pay the going wage rate. Graphically, this means that firms face a horizontal supply curve for labor, as Figure 14.3 shows. Given the market wage, profit maximizing firms hire workers up to the point where: $W_{mkt} = VMP_L$

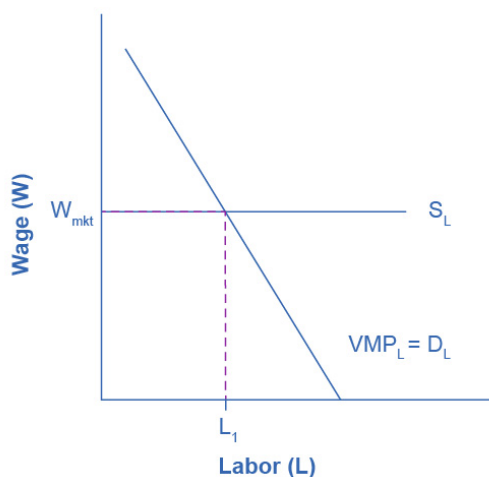


Figure 14.4 Equilibrium Employment for Firms in a Competitive Labor Market In a perfectly competitive labor market, firms can hire all the labor they want at the going market wage.

Therefore, they hire workers up to the point L_1 where the going market wage equals the value of the marginal product of labor.

Demand for Labor in Imperfectly Competitive Output Markets

If the employer does not sell its output in a perfectly competitive industry, they face a downward sloping demand curve for output, which means that in order to sell additional output the firm must lower its price. This is true if the firm is a monopoly, but it's also true if the firm is an oligopoly or monopolistically competitive. In this situation, the value of a worker's marginal product is the marginal revenue, not the price. Thus, the demand for labor is the marginal product times the marginal revenue.

The Demand for Labor = $MP_L \times MR$ = Marginal Revenue Product

# Workers (L)	1	2	3	4
MP_L	4	3	2	1
Marginal Revenue	\$4	\$3	\$2	\$1
MRP_L	\$16	\$9	\$4	\$1

Table 14.3 Marginal Revenue Product

What Determines the Going Market Wage Rate?

In the chapter on Labor and Financial Markets, we learned that the labor market has demand and supply curves like other markets. The demand for labor curve is a downward sloping function of the wage rate. The market demand for labor is the horizontal sum of all firms' demands for labor. The supply of labor curve is an upward sloping function of the wage rate. This is because if wages for a particular type of labor increase in a particular labor market, people with appropriate skills may change jobs, and vacancies will attract people from outside the geographic area. The market supply of labor is the horizontal summation of all individuals' supplies of labor.

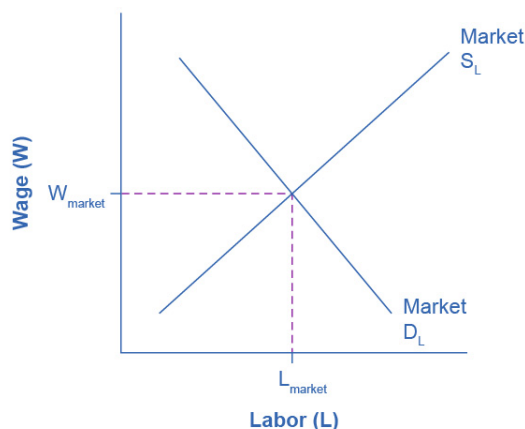


Figure 14.7 The Market Wage Rate In a competitive labor market, the equilibrium wage and employment level are determined where the market demand for labor equals the market supply of labor.

Like all equilibrium prices, the market wage rate is determined through the interaction of supply and demand in the labor market. Thus, we can see in Figure 14.7 for competitive markets the wage rate and number of workers hired.

The FRED database has a great deal of data on labor markets, starting at the wage rate and number of workers hired.

The United States Census Bureau for the Bureau of Labor Statistics publishes *The Current Population Survey*, which is a monthly survey of households (you can find a link to it by going to the FRED database found in the previous link), which provides data on labor supply, including numerous measures of the labor force size (disaggregated by age, gender and educational attainment), labor force participation rates for different demographic groups, and employment. It also includes more than 3,500 measures of earnings by different demographic groups.

14.2 Wages and Employment in an Imperfectly Competitive Labor Market

In the chapters on market structure, we observed that while economists use the theory of perfect competition as an ideal case of market structure, there are very few examples of perfectly competitive industries in the real world. What about labor markets? How many labor markets are perfectly competitive? There are probably more examples of perfectly competitive labor markets than perfectly competitive product markets, but that doesn't mean that all labor markets are competitive.

When a job applicant is bargaining with an employer for a position, the applicant is often at a disadvantage—needing the job more than the employer needs that particular applicant. John Bates Clark (1847–1938), often named as the first great American economist, wrote in 1907: “In the making of the wages contract the individual laborer is always at a disadvantage. He has something which he is obliged to sell and which his employer is not obliged to take, since he [that is, the employer] can reject single men with impunity.”

To give workers more power, the U.S. government has passed, in response to years of labor protests, a number of laws to create a more equal balance of power between workers and employers. These laws include some of the following:

- Setting minimum hourly wages
- Setting maximum hours of work (at least before employers pay overtime rates)
- Prohibiting child labor
- Regulating health and safety conditions in the workplace
- Preventing discrimination on the basis of race, ethnicity, gender, sexual orientation, and age
- Requiring employers to provide family leave
- Requiring employers to give advance notice of layoffs
- Covering workers with unemployment insurance

- Setting a limit on the number of immigrant workers from other countries

There are two sources of imperfect competition in labor markets. These are demand side sources, that is, labor market power by employers, and supply side sources: labor market power by employees. In this section we will discuss the former. In the next section we will discuss the latter.

A competitive labor market is one where there are many potential employers for a given type of worker, say a secretary or an accountant. Suppose there is only one employer in a labor market. Because that employer has no direct competition in hiring, if they offer lower wages than would exist in a competitive market, employees will have few options. If they want a job, they must accept the offered wage rate. Since the employer is exploiting its market power, we call the firm a **monopsony**, a term introduced and widely discussed by Joan Robinson (though she credited scholar Bertrand Hallward with invention of the word). The classical example of monopsony is the sole coal company in a West Virginia town. If coal miners want to work, they must accept what the coal company is paying. This is not the only example of monopsony. Think about surgical nurses in a town with only one hospital. A situation in which employers have at least some market power over potential employees is not that unusual. After all, most firms have many employees while there is only one employer. Thus, even if there is some competition for workers, it may not feel that way to potential employees unless they do their research and find the opposite.

How does market power by an employer affect labor market outcomes? Intuitively, one might think that wages will be lower than in a competitive labor market. Let's prove it. We will tell the story for a monopsonist, but the results will be qualitatively similar, although less extreme, for any firm with labor market power.

Think back to monopoly. The good news for the firm is that because the monopolist is the sole supplier in the market, it can charge any price it wishes. The bad news is that if it wants to sell a greater quantity of output, it must lower the price it charges. Monopsony is analogous. Because the monopsonist is the sole employer in a labor market, it can offer any wage that it wishes. However, because they face the market supply curve for labor, if they want to hire more workers, they must raise the wage they pay. This creates a quandary, which we can understand by introducing a new concept: the marginal cost of labor. The **marginal cost of labor** is the cost to the firm of hiring one more worker. However, here is the thing: we assume that the firm is determining how many workers to hire in total. They are not hiring sequentially. Let's look how this plays out with the example in Table 14.5.

Supply of Labor	1	2	3	4	5
Wage Rate	\$1 per hour	\$2 per hour	\$3 per hour	\$4 per hour	\$5 per hour

Total Cost of Labor	\$1	\$4	\$9	\$16	\$25
Marginal Cost of Labor	\$1	\$3	\$5	\$7	\$9

Table 14.5 The Marginal Cost of Labor

There are a couple of things to notice from the table. First, the marginal cost increases faster than the wage rate. In fact, for any number of workers more than one, the marginal cost of labor is greater than the wage. This is because to hire one more worker requires paying a higher wage rate, not just for the new worker but for all the previous hires also. We can see this graphically in Figure 14.7.

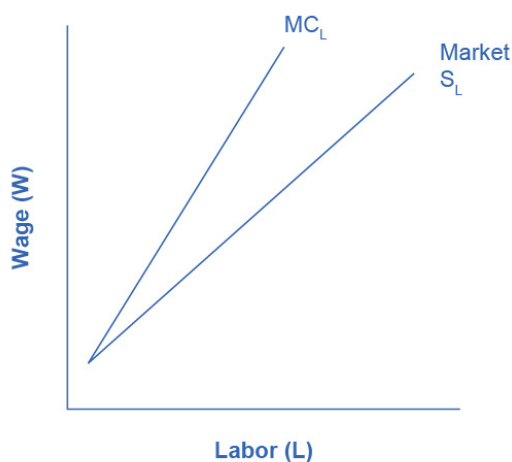


Figure 14.8 The Marginal Cost of Labor Since monopsonies are the sole demander for labor, they face the market supply curve for labor. In order to increase employment they must raise the wage they pay not just for new workers, but for all the existing workers they could have hired at the previous lower wage. As a result, the marginal cost of hiring additional labor is greater than the wage, and thus for any level of employment (above the first worker), MC_L is above the Market Supply of Labor.

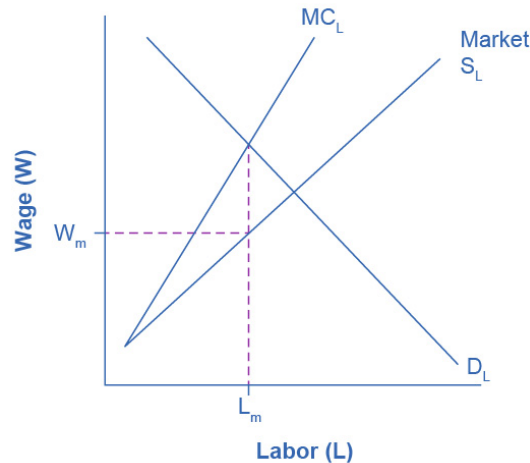


Figure 14.9 Labor Market Outcomes Under Monopsony A monopsony will hire workers up to the point L_m where its demand for labor equals the marginal cost of additional labor, paying the wage W_m given by the supply curve of labor necessary to obtain L_m workers. If the firm wants to maximize profits, it will hire labor up to the point L_m where $D_L = VMP$ (or MRP) = MC_L , as Figure 14.9 shows. Then, the supply curve for labor shows the wage the firm will have to pay to attract L_m workers. Graphically, we can draw a vertical line up from L_m to the Supply Curve for the label and then read the wage W_m off the vertical axis to the left. How does this outcome compare to what would occur in a perfectly competitive market? A competitive market would operate where $D_L = S_L$, hiring L_c workers and paying W_c wage. In other words, under monopsony employers hire fewer workers and pay a lower wage. While pure monopsony may be rare, many employers have some degree of market power in labor markets. The outcomes for those employers will be qualitatively similar though not as extreme as monopsony.

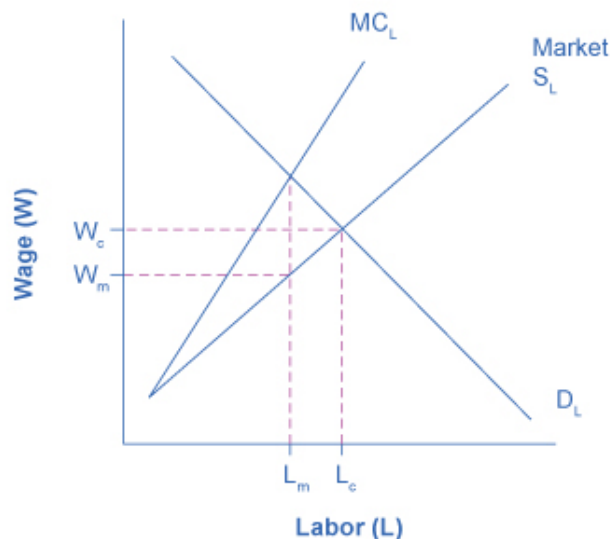


Figure 14.10 Comparison of labor market outcomes: Monopsony vs. Perfect Competition A monopsony hires fewer workers (L_m) than would be hired in a competitive labor market (L_c). In exploiting its market power, the monopsony can also pay a lower wage (W_m) than workers would earn in a competitive labor market (W_c).

14.3 Market Power on the Supply Side of Labor Markets: Unions

A labor union is an organization of workers that negotiates with employers over wages and working conditions. A labor union seeks to change the balance of power between employers and workers by requiring employers to deal with workers collectively, rather than as individuals. As such, a labor union operates like a monopoly in a labor market. We sometimes call negotiations between unions and firms **collective bargaining**.

The subject of labor unions can be controversial. Supporters of labor unions view them as the workers' primary line of defense against efforts by profit-seeking firms to hold down wages and benefits. Critics of labor unions view them as having a tendency to grab as much as they can in the short term, even if it means injuring workers in the long run by driving firms into bankruptcy or by blocking the new technologies and production methods that lead to economic growth. We will start with some facts about union membership in the United States.

14.4 Bilateral Monopoly

What happens when there is market power on both sides of the labor market, in other words, when a union meets a monopsony? Economists call such a situation a **bilateral monopoly**.

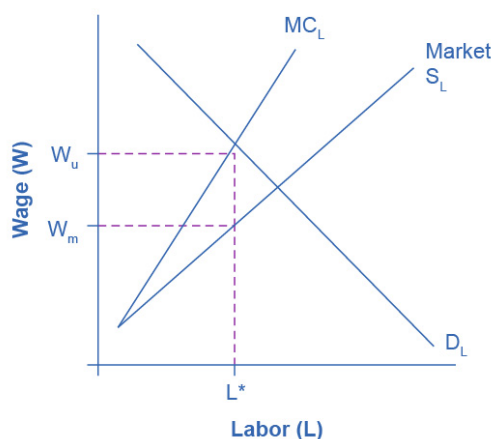


Figure 14.14 Bilateral Monopoly Employment, L^* , will be lower in a bilateral monopoly than in a competitive labor market, but the equilibrium wage is indeterminate, somewhere in the range between W_u , what the union would choose, and W_m , what the monopsony would choose.

A monopsony wants to reduce wages as well as employment, W_m and L^* in the figure. A union wants to increase wages, but at the cost of lower employment, W_u and L^* in the figure. Since both sides want to reduce employment, we can be sure that the outcome will be lower employment compared to a competitive labor market. What happens to the wage, though, is based on the monopsonist's relative bargaining power compared to the bargaining power of the union. The actual outcome is indeterminate in the graph, but it will be closer to W_u if the union has more power and closer to W_m if the monopsonist has more power.

14.5 Employment Discrimination

Barriers to equitable participation in the labor market drive down economic growth. When certain populations are underrepresented, underpaid, or mistreated in a labor market or industry, the negative outcomes can effect the larger economy. For example, many science and technology fields were either unwelcoming or overtly unaccepting of women and people of color. Some major contributors to these fields overcame these challenges. Mexican-American scientist Lydia Villa-Komaroff, for example, faced overt discrimination when her college advisor told her not to pursue chemistry because women didn't "belong" in chemistry. She pursued biology instead; she developed the first instance of synthetic insulin (the chemical that people with diabetes need in order to survive) through a process that has saved million of lives and is credited with launching the entire industry of biotechnology—one of the most important in the U.S. economy. But for every Villa-Komaroff, there have been thousands of women who were prevented from making those contributions. Beyond the personal impact on those people, consider the impact on those scientific fields, our overall quality of life, and the economy itself. Economist Lisa D. Cook has quantified the costs of these innovation losses. She estimates that GDP could be as much as 4.4% higher if women and people from minority populations were fully able to participate in the science and technology innovation process.

Discrimination involves acting on the belief that members of a certain group are inferior or deserve less solely because of a factor such as race, gender, or religion. There are many types of discrimination but the focus here will be on discrimination in labor markets, which arises if workers with the same skill levels—as measured by education, experience, and expertise—receive different pay or have different job opportunities because of their race or gender. Much of the data collected and published on these topics are limited in terms of the diversity of people represented, and focus particularly on binary gender, single-race, and single-ethnicity identities. While these characterizations do not capture the diversity of Americans, the findings are important in order to understand discrimination and other practices, and to consider the impacts of policies and changes. Also, while sex and gender are different, many data sets, laws, court decisions, and media accounts use the terms interchangeably. For consistency, we will use the terminology found in the source material and government data.

Earnings Gaps by Race and Gender

A possible signal of labor market discrimination is when an employer pays one group less than another. Figure 14.15 shows the average wage of Black workers as a ratio of the average wage of White workers and the average wage of female workers as a ratio of the average wage of male workers. Research by the economists Francine Blau and Laurence Kahn shows that the gap between the earnings of women and men did not move much in the 1970s, but has declined since the 1980s. Detailed analysis by economists Kerwin Kofi Charles and Patrick Bayer show that the gap between the earnings of Black and White people diminished in the 1970s, but grew again so that current differences are as wide as they were nearly 70 years ago. In both gender and race, an earnings gap remains.

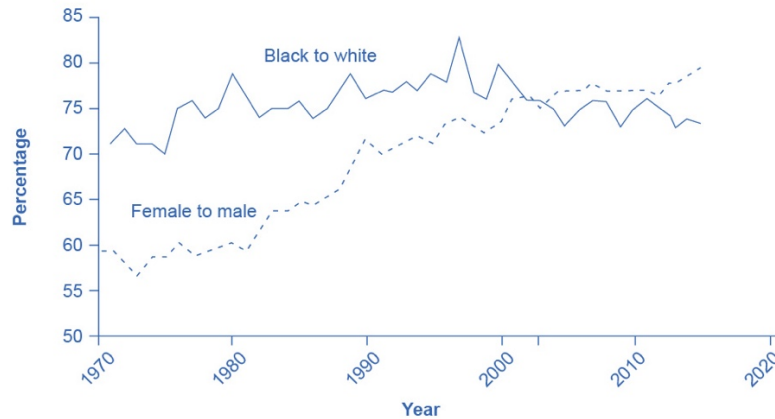


Figure 14.15 Wage Ratios by Sex and Race The ratio of wages for Black workers to White workers rose substantially in the late 1960s and through the 1970s. The 1990s saw a peak above 80% followed by a bumpy decline to the low 70s. The ratio of wages for female to male workers changed little through the 1970s. In both cases, a gap remains between the average wages of Black and White workers and between the average wages of female and male workers. Source: U.S. Department of Labor, Bureau of Labor Statistics.

An earnings gap between average wages, in and of itself, does not prove that discrimination is occurring in the labor market. We need to apply the same productivity characteristics to all parties (employees) involved. Gender discrimination in the labor market occurs when employers pay people of a specific gender less despite those people having comparable levels of education, experience, and expertise. (Read the Clear It Up about the sex-discrimination suit brought against Walmart.) Similarly, racial discrimination in the labor market exists when employers pay racially diverse employees less than their coworkers of the majority race despite having comparable levels of education, experience, and expertise. To bring a successful gender discrimination lawsuit, an employee must prove the employer is paying them less than an employee of a different gender who holds a similar job, with similar educational attainment, and with similar expertise. Likewise, someone who wants to sue on the grounds of racial discrimination must prove that the employer pays them less than an employee of another race who holds a similar job, with similar educational attainment, and with similar expertise.

The FRED database includes earnings data at earnings by age, gender and race/ethnicity. As stated previously and as we will see below, not every instance of a wage gap or employment inequity is a product of overt discrimination on the part of individual employers. Significant overall issues in societies, such as inequitable education or housing segregation, can lead to earning gaps and limitations on economic mobility. However, these wider issues usually affect people from minority populations and/or those who have been historically underrepresented in positions of power. Economist William A. Darity Jr., whose work is discussed in more detail below, indicates that individualized employer racism still exists, but it is largely practiced in "covert and subtle forms."

Investigating the Female/Male Earnings Gap

As a result of changes in law and culture, women began to enter the paid workforce in substantial numbers in the mid- to late-twentieth century. As of February 2022, 56.0% of women aged 20 and over held jobs, while 67.6% of men aged 20 and over did. Moreover, along with entering the workforce, women began to ratchet up their education levels. In 1971, 44% of undergraduate college degrees went to women. As of the 2018–19 academic year, women earned 57% of bachelor's degrees. In 1970, women received 5.4% of the degrees from law schools and 8.4% of the degrees from medical schools. By 2017, women were receiving just over 50% of the law degrees, and by 2019, 48% of the medical degrees. There are now slightly more women than men in both law schools and medical schools. These gains in education and experience have reduced the female/male wage gap over time. However, concerns remain about the extent to which women have not yet assumed a substantial share of the positions at the top of the largest companies or in the U.S. Congress.

There are factors that can lower women's average wages. Women are likely to bear a disproportionately large share of household responsibilities. A mother of young children is more likely to drop out of the labor force for several years or work on a reduced schedule than is the father. As a result, women in their 30s and 40s are likely, on average, to have less job experience than men. In the United States, childless women with the same education and experience levels as men are typically paid comparably. However, women with families and children are typically paid about 7% to 14% less than other women of similar education and work experience. Meanwhile, married men earn about 10% to 15% more than single men with comparable education and work experience. This circumstance or practice is often referred to as the "motherhood penalty" and the "fatherhood bonus."

Another aspect of the gender pay gap relates to work that isn't actually paid, such as household chores, caring for children and other family members, and cooking. Studies have found that globally and within the United States, women undertake far more of this work than do men; even women who work full time and/or bring in the majority of family income take on more of this unpaid work than the men in their households.

Economists study many aspects of sex- and gender-based earnings gaps, often revealing unexpected causes and impacts. For example, economists Jessica Pan, Jonathan Guryan, and Kerwin Kofi Charles analyzed decades of sociological and employment data and uncovered that the amount of sexism in the U.S. state where a woman was born is an indicator of the woman's earnings throughout her life, even if she moves away from her home state. In other words, women born in states with more pronounced sexist attitudes earn less, no matter where they live later on. Other economists showed that from 1950–2000, as women's representation increased in the workforce, jobs that became occupied by women experienced wage reductions relative to jobs being done by men—an outcome often referred to as "devaluation." The value of this research and similar investigations comes from the deeper understanding of the origins of the earnings gap, so that workers, employers, and governments can take steps to address them.

Investigating the Earnings Gap Related to Race and Ethnicity

Black people experienced blatant labor market discrimination during much of the twentieth century. Until the passage of the Civil Rights Act of 1964, it was legal in many states to refuse to hire a Black worker, regardless of the credentials or experience of that worker. Moreover, Black people were often denied access to educational opportunities, which in turn meant that they had lower levels of qualifications for many jobs. At least one economic study has shown that the 1964 law is partially responsible for the narrowing of the gap in Black–White earnings in the late 1960s and into the 1970s. For example, the ratio of total earnings of Black male workers to White male workers rose from 62% in 1964 to 75.3% in 2013, according to the Bureau of Labor Statistics.

However, the earnings gap between Black and White workers has not changed as much as the earnings gap between men and women has in the last half century. The remaining racial gap seems related both to continuing differences in education levels and to the presence of discrimination. Table 14.9 shows that the percentage of Black people who complete a four-year college degree remains substantially lower than the percentage of White people who complete college. According to the U.S. Census, both White and Black people have higher levels of educational attainment than Hispanic people and lower levels than Asian people. The lower average levels of education for Black workers surely explain part of the earnings gap. In fact, Black women who have the same levels of education and experience as White women receive, on average, about the same level of pay. One study shows that White and Black college graduates have identical salaries immediately after college; however, the racial wage gap widens over time, an outcome that suggests the possibility of continuing discrimination. Other researchers conducted a field experiment by responding to job advertisements with fictitious resumes using names that were either commonly associated with Black/African American people or names commonly associated with White people; they found that the White-associated names received 50 percent more callbacks for interviews.

Competitive Markets and Discrimination

Gary Becker (1930–2014), who won the Nobel Prize in economics in 1992, was one of the first to analyze discrimination in economic terms. Becker pointed out that while competitive markets can allow some employers to practice discrimination, it can also provide profit-seeking firms with incentives not to discriminate. Given these incentives, Becker explored the question of why discrimination persists.

If a business is located in an area with a large minority population and refuses to sell to minorities, it will cut into its own profits. If some businesses run by bigoted employers refuse to pay women and/or minorities a wage based on their productivity, then other profit-seeking employers can hire these workers. In a competitive market, if the business owners care more about the color of money than about the color of skin, they will have an incentive to make buying, selling, hiring, and promotion decisions strictly based on economic factors. Do not underestimate the power of markets to offer at least a degree of freedom to oppressed groups. In many countries, cohesive minority population groups like Jewish people and emigrant Chinese people have managed to carve out a space for themselves through their economic activities, despite legal and social discrimination against them. Many immigrants,

including those who come to the United States, have taken advantage of economic freedom to make new lives for themselves. However, history teaches that market forces alone are unlikely to eliminate discrimination. After all, discrimination against African Americans persisted in the market-oriented U.S. economy during the century between the ratification of the 13th Amendment, which abolished slavery in 1865, and the passage of the Civil Rights Act of 1964—and has continued since then, too.

Why does discrimination persist in competitive markets? Gary Becker sought to explain this persistence. Discriminatory impulses can emerge at a number of levels: among managers, among workers, and among customers. Consider the situation of a store owner or manager who is not personally prejudiced, but who has many customers who are prejudiced. If that manager treats all groups fairly, the manager may find it drives away prejudiced customers. In such a situation, a policy of nondiscrimination could reduce the firm's profits. After all, a business firm is part of society, and a firm that does not follow the societal norms is likely to suffer.

As economist William A. Darity Jr. points out, however, the "prejudiced customer" rationale falls apart when considering the many jobs that have no customer contact. Darity examined several theories regarding the persistence of employment discrimination, including rationales regarding group membership and employers' lack of information about candidates of other genders or races. Darity also directly studies and interprets others' work on discrimination in other countries, such as wage disparities between Sikh and Hindu men in India. Darity concludes that the competitive forces of the market have not been enough to overcome employment and wage discrimination, and, on their own, are unlikely to end such discrimination in the future.

Public Policies to Reduce Discrimination

A first public policy step against discrimination in the labor market is to make it illegal. For example, the Equal Pay Act of 1963 said that employers must pay men and women who do equal work the same. The Civil Rights Act of 1964 prohibits employment discrimination based on race, color, religion, sex, or national origin. The Age Discrimination in Employment Act of 1967 prohibited discrimination on the basis of age against individuals who are 40 years of age or older. The Civil Rights Act of 1991 provides monetary damages in cases of intentional employment discrimination. The Pregnancy Discrimination Act of 1978 was aimed at prohibiting discrimination against people in the workplace who are planning pregnancy, are pregnant, or are returning after pregnancy. Passing a law, however, is only part of the answer, since discrimination by prejudiced employers may be less important than broader social patterns and systems.

The 1964 Civil Rights Act created an important government organization, the Equal Employment Opportunity Commission, to investigate employment discrimination and protect workers who filed complaints against employers. Economist Phyllis Ann Wallace, who had previously worked for U.S. intelligence services, was appointed as the commission's chief of technical studies. In this role she collected and organized a massive amount of public and

private sector data, as well as mentored and directed economists and other analysts in their investigations.

These laws against discrimination have reduced the gender wage gap. A 2007 Department of Labor study compared salaries of men and women who have similar educational achievement, work experience, and occupation and found that the gender wage gap is only 5%.

In the case of the earnings gap between Black people and White people (and also between Hispanic people and White people), probably the single largest step that could be taken at this point in U.S. history to close the earnings gap would be to reduce the gap in educational attainment. Part of the answer to this issue involves finding ways to improve the performance of schools, which is a highly controversial topic in itself. In addition, the education gap is unlikely to close unless Black and Hispanic families and peer groups strengthen their culture of support for educational attainment.

Affirmative action is the name given to active efforts by government or businesses that give special rights to minorities in hiring and promotion to make up for past discrimination. Affirmative action, in its limited and not especially controversial form, means making an effort to reach out to a broader range of minority candidates for jobs. In its more aggressive and controversial form, affirmative action required government and companies to hire a specific number or percentage of minority employees. However, the U.S. Supreme Court has ruled against state affirmative action laws. Today, the government applies affirmative action policies only to federal contractors who have lost a discrimination lawsuit. The federal Equal Employment Opportunity Commission (EEOC) enforces this type of redress.

14.6 Immigration

Most Americans would be outraged if a law prevented them from moving to another city or another state. However, when the conversation turns to crossing national borders and is about other people arriving in the United States, laws preventing such movement often seem more reasonable. Some of the tensions over immigration stem from worries over how it might affect a country's culture, including differences in language, and patterns of family, authority, or gender relationships. Economics does not have much to say about such cultural issues. Some of the worries about immigration do, however, have to do with its effects on wages and income levels, and how it affects government taxes and spending. On those topics, economists have insights and research to offer.

Historical Patterns of Immigration

Supporters and opponents of immigration look at the same data and see different patterns. Those who express concern about immigration levels to the United States point to graphics like Figure 14.17 which shows total inflows of immigrants decade by decade through the twentieth and into the twenty-first century. Clearly, the level of immigration has been high and rising in recent years, reaching and exceeding the towering levels of the early twentieth century. However, those who are less worried about immigration point out that the high immigration levels of the early twentieth century happened when total population was much lower. Since the U.S. population roughly tripled during the twentieth century, the seemingly

high levels in immigration in the 1990s and 2000s look relatively smaller when they are divided by the population.

From where have the immigrants come? Immigrants from Europe were more than 90% of the total in the first decade of the twentieth century, but less than 20% of the total by the end of the century. By the 2000s, about half of U.S. immigration came from the rest of the Americas, especially Mexico, and about a quarter came from various countries in Asia.

Economic Effects of Immigration

A surge of immigration can affect the economy in a number of different ways. In this section, we will consider how immigrants might benefit the rest of the economy, how they might affect wage levels, and how they might affect government spending at the federal and local level.

To understand the economic consequences of immigration, consider the following scenario. Imagine that the immigrants entering the United States matched the existing U.S. population in age range, education, skill levels, family size, and occupations. How would immigration of this type affect the rest of the U.S. economy? Immigrants themselves would be much better off, because their standard of living would be higher in the United States. Immigrants would contribute to both increased production and increased consumption. Given enough time for adjustment, the range of jobs performed, income earned, taxes paid, and public services needed would not be much affected by this kind of immigration. It would be as if the population simply increased a little.

Now, consider the reality of recent immigration to the United States. Immigrants are not identical to the rest of the U.S. population. About one-third of immigrants over the age of 25 lack a high school diploma. As a result, many of the recent immigrants end up in jobs like restaurant and hotel work, lawn care, and janitorial work. This kind of immigration represents a shift to the right in the supply of unskilled labor for a number of jobs, which will lead to lower wages for these jobs. The middle- and upper-income households that purchase the services of these unskilled workers will benefit from these lower wages. However, low-skilled U.S. workers who must compete with low-skilled immigrants for jobs will tend to be negatively impacted by immigration.

The difficult policy questions about immigration are not so much about the overall gains to the rest of the economy, which seem to be real but small in the context of the U.S. economy, as they are about the disruptive effects of immigration in specific labor markets. One disruptive effect, as we noted, is that immigration weighted toward low-skill workers tends to reduce wages for domestic low-skill workers. A study by Michael S. Clune found that for each 10% rise in the number of employed immigrants with no more than a high school diploma in the labor market, high school students reduced their annual number of hours worked by 3%. The effects on wages of low-skill workers are not large—perhaps in the range of decline of about 1%. These effects are likely kept low, in part, because of the legal floor of federal and state minimum wage laws. In addition, immigrants are also thought to contribute to increased demand for local goods and services which can stimulate the local low skilled labor market. It is also possible that

employers, in the face of abundant low-skill workers, may choose production processes which are more labor intensive than otherwise would have been. These various factors would explain the small negative wage effect that the native low-skill workers observed as a result of immigration.

Another potential disruptive effect is the impact on state and local government budgets. Many of the costs imposed by immigrants are costs that arise in state-run programs, like the cost of public schooling and of welfare benefits. However, many of the taxes that immigrants pay are federal taxes like income taxes and Social Security taxes. Many immigrants do not own property (such as homes and cars), so they do not pay property taxes, which are one of the main sources of state and local tax revenue. However, they do pay sales taxes, which are state and local, and the landlords of property they rent pay property taxes. According to the nonprofit Rand Corporation, the effects of immigration on taxes are generally positive at the federal level, but they are negative at the state and local levels in places where there are many low-skilled immigrants.

Proposals for Immigration Reform

The Congressional Jordan Commission of the 1990s proposed reducing overall levels of immigration and refocusing U.S. immigration policy to give priority to immigrants with higher skill levels. In the labor market, focusing on high-skilled immigrants would help prevent any negative effects on low-skilled workers' wages. For government budgets, higher-skilled workers find jobs more quickly, earn higher wages, and pay more in taxes. Several other immigration-friendly countries, notably Canada and Australia, have immigration systems where those with high levels of education or job skills have a much better chance of obtaining permission to immigrate. For the United States, high tech companies regularly ask for a more lenient immigration policy to admit a greater quantity of highly skilled workers under the H1B visa program.

The Obama Administration proposed the so-called “DREAM Act” legislation, which would have offered a path to citizenship for those classified as illegal immigrants who were brought to the United States before the age of 16. Despite bipartisan support, the legislation failed to pass at the federal level. However, some state legislatures, such as California, have passed their own Dream Acts.

Between its plans for a border wall, increased deportation of undocumented immigrants, and even reductions in the number of highly skilled legal H1B immigrants, the Trump Administration had a much less positive approach to immigration. Most economists, whether conservative or liberal, believe that while immigration harms some domestic workers, the benefits to the nation exceed the costs. President Biden has been considerably more positive about immigration than his predecessor. However, given the presence of considerable disagreement within the overall population about the desirability of immigration, it is unlikely that any significant immigration reform will take place in the near future.