Work & Labor: Jobs, Pay, and Power

Figures current as of October 2026

How work is counted, what it pays, and who holds the power: the workforce and the jobs report, the slow-hiring market of 2026, pay and labor's share, what artificial intelligence has done to work, the first job, immigration, unions and strikes, the rules of work, gig and remote work, work around the world, and what to watch.

MODULE 1 — Who Works

Goal: Map the workforce.

The 170 million Americans in the labor force and the 159 million payroll jobs: the industries and occupations, with home health and personal care aides now the largest occupation; who employs them, from Walmart to the self-employed; and the long shift from farm to factory to the care economy.

MODULE 2 — Counting Work

Goal: Understand how the jobs numbers are made, and weigh whether they can still be trusted.

The payroll and household surveys; the unemployment rate and its broader measures; openings, quits, and claims; the revisions that cut 2025's job growth to 116,000; the commissioner's firing, the survey that was never taken, and the strained statistics of 2025-26.

MODULE 3 — The Cycle

Goal: Read the 2026 job market, and weigh whether it is weakening or simply short of new workers.

From the quits boom of 2021-22 to a market where hiring fell to its 2010-12 rate while layoffs stayed low; health care's share of the gains; breakeven job growth near zero; the oil shock and the Fed's September rate rise.

MODULE 4 — What Work Pays

Goal: Understand how pay is set, and weigh whether it has come apart from productivity.

Competition, employers' power, bargaining, and norms; pay up 3.0% in a year against prices up 3.7%; the gains at the bottom and their 2025 slip; the gaps by sex, race, and rank; benefits as pay; labor's share of income at its lowest since 1947.

MODULE 5 — AI and Work

Goal: Weigh what artificial intelligence has done to work so far against what was predicted.

Exposure measured task by task; how firms use AI; the payroll evidence that young workers in exposed jobs are hired less; the layoffs blamed on AI, and the claims behind them; productivity without an AI signal yet; the forecasts and the responses.

MODULE 6 — The First Job

Goal: Understand the young worker's market, and weigh whether college still pays.

Recent graduates at a record gap over all workers; why a weak start costs years of pay; the turn to apprenticeships and the trades; what a degree earns and what it costs.

MODULE 7 — Who Comes to Work

Goal: Follow the supply of workers, and weigh what immigration does to native-born workers.

Participation, aging, women and childcare, and men's long decline; immigrants as a fifth of the labor force; net migration cut to a fraction of its 2024 level; the raids and the industries they hit; the visa fights of 2025-26.

MODULE 8 — Unions and Strikes

Goal: Understand what unions do and where they stand, and weigh their effects.

Bargaining and the strike; membership from 20.1% of workers in 1983 to 10.0%; approval at 71%; the strikes from the autoworkers to the 2026 nurses; Hollywood's AI terms; a labor board without a quorum, and a Supreme Court ruling that, in effect, ended its members' protection from removal.

MODULE 9 — The Rules of Work

Goal: Learn the law of work, and weigh whether the minimum wage costs jobs.

Employment at will and its exceptions; the federal minimum of $7.25 against the states'; overtime and the new tax deductions for tips and overtime; noncompetes, safety, unemployment insurance, and paid leave; the Labor Department in 2026.

MODULE 10 — Gigs and Contracts

Goal: Understand independent work and where work happens, and weigh whether gig workers should be employees.

Contractors, app work, and pay set by algorithm; the employee-or-contractor fight from California to Brussels; second jobs and hours; remote and hybrid work after the return-to-office orders; the four-day week.

MODULE 11 — Work Around the World

Goal: Read the world's labor markets, and weigh whether protecting jobs costs jobs.

Two billion informal workers; China's graduates and its youth unemployment; India's new labor codes; Europe's rules and Germany's factory losses; Japan's wage round, Mexico's 40-hour week, and the Gulf's migrant workers.

MODULE 12 — Where Things Stand, and What to Watch

Goal: Close with the argument, the contradictions, and a dated watch list.

The course's argument on a page; the contradictions no single module states; what to watch from October 2026 on; and a last word.

A note on the sources: most of the American figures come from the Bureau of Labor Statistics (BLS), the Labor Department's statistics agency. Its monthly payroll survey of businesses is the Current Employment Statistics (CES), its household survey, run with the Census Bureau, is the Current Population Survey (CPS), and its survey of hiring and quitting is the Job Openings and Labor Turnover Survey (JOLTS). Pay figures also come from the Federal Reserve Bank of Atlanta, immigration estimates from the Congressional Budget

Office (CBO), the Census Bureau, and independent researchers, and the world's figures from the International Labour Organization (ILO) and the Organisation for Economic Co-operation and Development (OECD). The courts and the National Labor Relations Board (NLRB) supply the law, and the Federal Reserve (the Fed) the policy.

Private sources, such as the payroll processor ADP, the job sites Indeed and Handshake, and the outplacement firm Challenger, Gray & Christmas, are named where they appear, and companies' statements about artificial intelligence (AI) are reported as claims, not findings. The data of 2025-26 have unusual gaps, described in Module 2, so the course says where a figure is affected. Where the field argues, over the jobs data, the market's direction, pay, AI, college, immigration, unions, the minimum wage, gig work, and job protection, the course makes each case as its advocates make it, gives the evidence, and then states its own reading once.

Key Numbers, as of October 2026

The measurements the course relies on

Measure	Figure	Period	Source and release
Payroll jobs	159.0 million, up 29,000 on the month: private employers +46,000, government -17,000	September 2026	BLS, *Employment Situation* (October 2, 2026)
Revisions to earlier months	July from +21,000 to -10,000; August from +162,000 to +133,000	July-August 2026	BLS (October 2, 2026)
Unemployment	4.2% on the official measure (U-3); 7.6% on the broadest (U-6)	September 2026	BLS (October 2, 2026)
Labor force and participation	170.3 million people working or looking for work; 61.8% of the adult population	September 2026	BLS household survey (October 2, 2026)
Prime-age employment rate	80.7% of people aged 25-54 have a job	September 2026	BLS household survey (October 2, 2026)
Openings and turnover	7.1 million job openings; hires 3.3% of employment a month, quits 1.9%, layoffs and discharges 1.0%	August 2026	BLS, JOLTS (September 29, 2026)
Jobless claims	Initial claims 199,000 (week to October 10); continuing claims 1.71 million (week to October 3)	October 2026	Labor Department (October 15, 2026)
Hourly pay	Average hourly earnings $37.81, up 3.0% in a year; after inflation, down 0.7%	September 2026	BLS, *Employment Situation* (October 2) and *Real Earnings* (October 14, 2026)
Employment cost index	Total compensation up 3.4%: wages and salaries 3.2%, private health benefits 6.0%	Year to June 2026	BLS (July 31, 2026)
Labor share	52.8% of nonfarm business output paid to workers, the lowest since the series began in 1947	Second quarter of 2026	BLS, *Productivity and Costs* (September 3, 2026)
Productivity	Output per hour up 2.1% in 2025 (3.0% in 2024); up 1.4% at an annual rate in the second quarter of 2026	2025-26	BLS (March 24 and September 3, 2026)
Prices	Consumer price index (CPI) up 3.7% in a year; excluding food and energy, 2.6%	September 2026	BLS (October 14, 2026)
Interest rates	Federal funds target 3.75-4.00%, after a quarter-point rise by a 12-0 vote	Set September 16, 2026	Federal Reserve
Union membership	10.0% of wage and salary workers (14.7 million): private sector 5.9%, public sector 32.9%; 11.2% covered by a union contract	2025 (an 11-month average)	BLS, *Union Members* (February 18, 2026)
Foreign-born workers	32.7 million, 19.1% of the labor force	2025 (an 11-month average)	BLS, *Foreign-Born Workers* (May 19, 2026)
Net migration	Estimates run from about -295,000 to +1.3 million, against 2.7 million in the year to July 2024	2025	Brookings Institution and American Enterprise Institute (AEI); Congressional Budget Office (CBO); Census Bureau
Minimum wage	Federal $7.25 since July 24, 2009; 30 states and the District of Columbia set more; the highest are the District, at $18.40, and Washington State, at $17.13	As of July 1, 2026	Labor Department
Recent college graduates	5.6% unemployed and 42% underemployed (ages 22-27)	Second quarter of 2026	Federal Reserve Bank of New York

Measure	Figure	Period	Source and release
Job cuts blamed on AI	120,136 of 573,195 announced cuts (21%), the most-cited reason, while all announced cuts fell 39%	January-September 2026	Challenger, Gray & Christmas (October 1, 2026)
World unemployment	4.9%, about 186 million people	2026 (projection)	ILO, *Employment and Social Trends 2026* (January 14, 2026)
China's youth unemployment	18.9% of urban 16-to-24-year-olds in the labor force, excluding students	August 2026	National Bureau of Statistics (September 17, 2026)
Euro-area unemployment	6.4%	August 2026	Eurostat (October 1, 2026)

Household-survey figures for 2025 average eleven months, because no survey was taken in October 2025, and the population estimates applied from January 2026 lowered the measured labor force by about 1.4 million, so comparisons across that date need care (Module 2). Rates are seasonally adjusted unless the period is a year.

Who's Who

The people and bodies the course names, as of October 18, 2026

Officials

Name or body	Who they are	Why they matter to work
Kevin Warsh	Chair of the Federal Reserve since May 22, 2026; age 56	Leads the central bank, which raised its rate target on September 16, 2026 with hiring at its 2010-12 pace
Keith Sonderling	Secretary of Labor, sworn in October 2, 2026 after a 47-41 confirmation vote; acting secretary from late April; age 43	Runs the Labor Department and its statistics agency; it proposed new contractor and joint-employer rules in 2026
Brett Matsumoto	Commissioner of Labor Statistics since August 11, 2026, confirmed 51-47; a BLS economist since 2015	Leads BLS after the firing of his predecessor, Erika McEntarfer, on August 1, 2025
James R. Murphy	Chairman of the NLRB since March 27, 2026; a member since January 7, 2026, his term running to December 16, 2027	Chairs the board that runs union elections and rules on unfair labor practices, with a 3-1 Republican majority
Crystal Carey	General Counsel of the NLRB since January 7, 2026	Decides which unfair-labor-practice cases the agency brings
Andrea Lucas	Chair of the Equal Employment Opportunity Commission (EEOC) since November 6, 2025; born 1985 or 1986	Leads the agency that enforces the laws against discrimination in hiring, pay, and firing
Scott Bessent	Secretary of the Treasury since January 28, 2025; age 64	His department runs the 2025 tax deductions for tips and overtime pay
David Venturella	Acting Director of Immigration and Customs Enforcement (ICE) since June 1, 2026; the agency has had no confirmed director since January 2017	Runs the worksite raids and immigration detention
John Roberts	Chief Justice of the United States since September 29, 2005; age 71	Wrote the June 29, 2026 ruling that lets presidents remove members of independent agencies, the Fed excepted

Unions

Name or body	Who they are	Why they matter to work
American Federation of Labor and Congress of Industrial Organizations (AFL-CIO)	The main federation of American unions; President Liz Shuler since 2021, re-elected June 9, 2026; born 1970	Speaks for affiliated unions with nearly 15 million members, by its count
Service Employees International Union (SEIU)	President April Verrett since May 19, 2024; age 52	Nearly two million members in health care, building services, and the public sector, by its count; backs California's rideshare drivers
International Brotherhood of Teamsters	General President Sean O'Brien since March 22, 2022, re-elected June 16, 2026; born 1971 or 1972	Organizing Amazon's drivers and warehouses; opposes driverless trucks
United Auto Workers (UAW)	President Shawn Fain since March 26, 2023; unofficial results of October 12, 2026 give him a second term; age 57	Led the 2023 strike against the three Detroit automakers
National Education Association (NEA)	President Princess R. Moss since September 1, 2026, succeeding Becky Pringle	The largest American union, of teachers and school staff
American Federation of Teachers (AFT)	President Randi Weingarten since 2008, re-elected July 19, 2026; age 68	Teachers, nurses, and public employees; 1.875 million members, by its count

Name or body	Who they are	Why they matter to work
New York State Nurses Association (NYSNA)	President Nancy Hagans; part of National Nurses United	Led about 15,000 nurses on strike at three New York hospital systems from January 12, 2026
United Nurses Associations of California/Union of Health Care Professionals (UNAC/UHCP)	President Charmaine Morales since 2022	Led 31,000 Kaiser Permanente workers on strike from January 26 to February 24, 2026
Workers United	An SEIU affiliate led by President Lynne Fox since 2016	Represents baristas at 706 unionized Starbucks stores, still without a first contract as of August 2026
International Association of Machinists and Aerospace Workers (IAM)	President Brian Bryant since January 1, 2024	Struck Boeing in 2024 and Boeing's St. Louis-area plants in 2025
Writers Guild of America West	President Michele Mulroney since September 2025	Writers ratified a four-year contract on April 24, 2026 without a strike, keeping limits on AI
Screen Actors Guild-American Federation of Television and Radio Artists (SAG-AFTRA)	President Sean Astin since September 12, 2025; age 55	Ratified a contract on June 4, 2026 that limits AI-made performers
International Longshoremen's Association (ILA)	President Harold Daggett since 2011	Led the October 2024 strike at East and Gulf Coast ports over pay and automation

Employers and platforms

Name or body	Who they are	Why they matter to work
Walmart	President and CEO John Furner since February 1, 2026; born 1974	The largest private employer in the United States, with about 1.6 million American workers
Amazon	President and CEO Andy Jassy since July 5, 2021; age 58	1.576 million employees worldwide at the end of 2025; cut 16,000 corporate jobs in January 2026
United States Postal Service	Postmaster General David Steiner since July 15, 2025	One of the largest employers, with about 599,000 workers
Uber and DoorDash	Led by Dara Khosrowshahi (Uber's CEO since 2017; age 57) and Tony Xu (DoorDash's co-founder and CEO)	Their drivers and couriers work as independent contractors, the status at the center of the gig-work fight

Data and research

Name or body	Who they are	Why they matter to work
ADP Research	The research arm of the payroll processor ADP; chief economist Nela Richardson	Publishes a monthly private-jobs count from its payroll records, which also underpin Stanford's studies of young workers
Revelio Labs	A workforce-data company that builds job counts from online employment records and job postings	Publishes a monthly jobs count begun during the fall 2025 shutdown
Challenger, Gray & Christmas	A Chicago outplacement firm founded in 1966	Counts announced job cuts each month and the reasons employers give
Indeed Hiring Lab and Handshake	The research arms of a job site and of a college career network	Track job postings, including early-career postings and applications per job
Federal Reserve Bank of New York	Its research group publishes data on recent graduates and surveys of regional firms	The source for graduates' unemployment and for how firms use AI

Name or body	Who they are	Why they matter to work
Erik Brynjolfsson	Stanford professor; directs the Digital Economy Lab	Lead author of the payroll study of young workers in jobs exposed to AI
David Autor	Professor at the Massachusetts Institute of Technology (MIT); head of its economics department since July 1, 2026	Studies how technology removes and creates work
Daron Acemoglu	MIT Institute Professor; 2024 Nobel laureate in economics; age 59	A leading skeptic of large near-term productivity gains from AI
George Borjas	Harvard Kennedy School professor; age 76	The leading voice for the view that immigration lowers the wages of competing native workers
David Card	University of California, Berkeley professor; 2021 Nobel laureate in economics	Co-wrote the 1994 minimum-wage study of New Jersey's fast-food restaurants; studied the 1980 Mariel boatlift
Giovanni Peri	University of California, Davis professor; age 57	Finds that immigrants mostly complement native workers
Arindrajit Dube	University of Massachusetts Amherst professor	Co-wrote the 2019 study of 138 state minimum-wage increases

International

Name or body	Who they are	Why they matter to work
International Labour Organization (ILO)	The United Nations agency for work; Director-General Gilbert Houngbo since October 1, 2022; age 65	Publishes the world's employment figures and sets international labor standards
National Bureau of Statistics (NBS)	China's statistics agency; Commissioner Kang Yi since March 3, 2022	Publishes China's youth unemployment rate
Ministry of Statistics and Programme Implementation	India's statistics ministry, which runs the Periodic Labour Force Survey	The source for India's unemployment and participation figures
Japanese Trade Union Confederation (Rengo)	Japan's largest union federation; President Tomoko Yoshino since October 6, 2021	Coordinates the spring wage round, which averaged 5.01% in 2026

Terms

The vocabulary of the labor market

Term	Meaning
Labor force	People 16 and older who are working or actively looking for work; it excludes the military and people in institutions such as prisons
Labor force participation rate	The labor force as a share of the civilian population aged 16 and older, outside institutions
Employment rate (employment-population ratio)	The employed as a share of that same population; the prime-age version covers ages 25 to 54, leaving out most schooling and retirement
U-3 and U-6	U-3 is the official unemployment rate: people without work who are available and looked in the past four weeks. U-6 adds people who want work but have stopped looking, and part-timers who want full-time work
Hires, quits, and layoffs rates	Hires, voluntary departures, and involuntary separations in a month, each as a share of employment (from JOLTS)
Breakeven job growth	The monthly payroll gain that keeps the unemployment rate steady; it falls when the labor force grows more slowly
Benchmark revision	The annual re-anchoring of the payroll count to near-complete tax records, previewed in late summer and applied each February
Labor share	The share of output or income paid to workers as wages, salaries, and benefits; the rest goes to capital as profit, interest, rent, and depreciation
Monopsony	An employer's power to pay less than a competitive wage because workers have few other employers to choose from
At-will employment	The American default: an employer may fire a worker for any reason that is not illegal, and a worker may quit at any time; Montana is the exception
Right-to-work law	A state law barring contracts that require workers to join a union or pay it fees, allowed by the Taft-Hartley Act of 1947
Union membership rate and coverage	The membership rate (also called union density) is union members as a share of wage and salary workers; coverage adds the nonmembers whose jobs a union contract covers
Independent contractor	A self-employed worker who sells services to clients rather than working as an employee
Contingent work	Jobs that workers do not expect to last, with no explicit or implicit promise of continuing employment
Not in employment, education, or training (NEET)	Young people outside both work and schooling; the ILO counts ages 15 to 24, the OECD often 15 to 29

Module 1 — Who Works

The Workforce, What It Does, and Who Pays It

Recommended Reading / Reference

Book: Studs Terkel, *Working: People Talk About What They Do All Day and How They Feel About What They Do* (1974), Americans in dozens of occupations describing their jobs in their own words, still the best portrait of the people the statistics count

Reference: BLS, *The Employment Situation* (monthly; Tables A-1 and B-1) and the Occupational Employment and Wage Statistics (annual), the sources for the counts in this module

1a. What Counts as Work and a Worker

In the statistics this course uses, work means paid work: labor done for a wage, a salary, a fee, or a business's profit. A parent raising children, an adult nursing a sick relative, and a volunteer coaching a team all work, but none of them counts as employed for that work, because no one pays them. The line is a convention, not a judgment. It lets the government measure something it can count every month, and it means that when care moves from the home into a paid job, measured employment rises even though the work is the same.

The counts sort adults into three groups. The **employed** did some paid work in the survey week. The **unemployed** had no job but were available for one and looking. Everyone else, from retirees and full-time students to caregivers and people who have given up looking, is **not in the labor force**. The **labor force** is the first two groups together, the people who work or want to (Module 2 gives the exact survey definitions). Uniformed military personnel are left out of these counts.

A worker and a job are not the same thing. A person with two part-time jobs is one worker in a count of people and two jobs in a count of payrolls. Workers are also paid in different ways. Most are **employees**, paid a wage or salary by an employer that withholds their taxes. The **self-employed** run their own businesses, either unincorporated, as sole owners or partners, or incorporated, as employees of companies they own. Independent contractors, paid by the job rather than by the hour or the year, sit between the two, and their status is fought over in courts and legislatures (Module 10).

1b. The Labor Force and the Jobs

In September 2026 the American labor force numbered 170.3 million people, of whom 163.2 million had jobs and 7.1 million were unemployed (BLS household survey, released October 2, 2026). Employers' payrolls held 159.0 million jobs, a preliminary count from the separate survey of businesses. The two employment counts differ by about 4 million because one counts people, including the self-employed and farm workers, and the other counts jobs on nonfarm payrolls, where a person with two jobs appears twice (Module 2 explains both surveys).

Sorted by industry (table), the jobs describe an economy that mostly provides services. Inside the largest group, health care and social assistance employed 24.0 million, which makes it the largest private industry, more than half again as large as retail. Government is the second-largest group, and about two of every three government jobs are local: teachers, police officers, firefighters, and the staff of counties, cities, and school districts. Restaurants and bars alone employ nearly as many people as all of manufacturing.

Each workplace is assigned to one industry by its main activity, under the North American Industry Classification System that the United States shares with Canada and Mexico. A cook in a hospital kitchen therefore counts in health care, and an accountant at a car plant counts in manufacturing. Private employers account for 135.7 million of the payroll jobs.

Industry	Jobs, September 2026	What the work is
Private education and health services	28.0 million	Hospitals, doctors' offices, nursing homes, home care, child care, private schools and colleges
Government (federal, state, and local)	23.3 million	Public schools and universities, police and fire, courts, the Postal Service, civilian staff of the armed forces
Professional and business services	22.5 million	Law, accounting, engineering, computer design, consulting, temporary help, cleaning, security
Leisure and hospitality	17.0 million	Restaurants and bars (12.4 million), hotels, amusement and recreation
Retail trade	15.5 million	Stores, gas stations, and online sellers
Manufacturing	12.7 million	Factories, from food and chemicals to cars, aircraft, and chips
Financial activities	9.1 million	Banks, insurers, real estate
Construction	8.36 million	Builders and the specialty trades
Transportation and warehousing	6.6 million	Trucking, delivery, airlines, warehouses
Wholesale trade	6.1 million	Distributors selling to other businesses
Other services	6.0 million	Repair shops, personal care, laundries, religious and civic groups
Information	2.7 million	Publishing, software, telecommunications, film, data processing
Utilities, mining, and logging	1.2 million	Power and water, oil and gas, mines, timber

BLS, *The Employment Situation*, Table B-1, September 2026 (preliminary), released October 2, 2026. Seasonally adjusted; the groups sum to the 159.0 million total.

1c. The Occupations

An industry describes what an employer sells; an occupation describes what a worker does. A hospital employs cooks, accountants, and security guards as well as nurses, and a car factory employs managers and truck drivers as well as assemblers. BLS's survey of employers' occupations, which covers about 830 occupations and leaves out the self-employed, gives the count for May 2025, released May 15, 2026 (table).

Grouped more broadly, the healthcare practitioners and technical occupations, from physicians and nurses to pharmacists and technicians, numbered 9.8 million. Educational instruction and library occupations numbered 9.1 million, among them 1.4 million elementary school teachers and 1.4 million teaching assistants. Construction and extraction occupations numbered 6.4 million.

Rank	Occupation	Workers, May 2025
1	Home health and personal care aides	4.3 million
2	Retail salespersons	3.9 million
3	Fast food and counter workers	3.9 million
4	General and operations managers	3.5 million
5	Registered nurses	3.4 million
6	Cashiers	3.1 million

Rank	Occupation	Workers, May 2025
7	Laborers and freight, stock, and material movers, by hand	3.0 million
8	Stockers and order fillers	2.8 million
9	Customer service representatives	2.6 million
10	Office clerks, general	2.5 million

BLS, Occupational Employment and Wage Statistics, May 2025, released May 15, 2026. Wage and salary jobs only; the self-employed are excluded.

The list is led by the aides who bathe, dress, and feed older and disabled people, many of them in their clients' homes, and it includes four store or food-counter jobs: retail salespersons, fast food and counter workers, cashiers, and stockers and order fillers. The laborers and material movers work largely in warehouses and on loading docks, the back rooms of the same retail economy.

Eight of the ten largest occupations paid less than the average for all occupations, from $32,150 a year for fast food and counter workers to $46,590 for customer service representatives. The average wage for all occupations was $69,770. Only registered nurses, who averaged $101,420, and general and operations managers, at $134,940, paid more than that. Most of the country's commonest jobs are service jobs paid toward the bottom of the scale. The best-paid occupations employ few people, led by pediatric surgeons at $502,050 and cardiologists at $454,940.

1d. Who Employs America

Four kinds of employer pay American workers: large companies, small businesses, governments, and the workers themselves. The largest private employer is Walmart, with about 2.1 million employees worldwide and about 1.6 million in the United States, by its annual report for the year to January 31, 2026. Amazon reported about 1,576,000 employees worldwide at the end of 2025 and gives no American total. Its filing adds that it also uses independent contractors and temporary workers, who are not in that count, so a company's headcount is not the same as the number of people who work for it. The Postal Service, an independent federal agency, employed almost 600,000 people in September 2026, more than a fifth of all federal civilian jobs.

Small businesses employ almost half the private workforce. The Small Business Administration's Office of Advocacy, which treats firms with fewer than 500 employees as small, counted 36.2 million small businesses employing 62.3 million people, 45.9% of private-sector workers, in its February 2026 summary. That is fewer than two employees per business, because the count includes the many people who run a business alone. The small-business jobs are therefore concentrated in the minority of small firms that hire.

Governments are the third employer. Federal civilian employment, 2.7 million, is the smallest part. States employ 5.5 million and local governments 15.2 million, more than half of them in public schools, so states and localities together employ more than seven times as many people as the federal government. The cuts to the federal workforce since 2025 belong to the cycle described in Module 3.

The self-employed are the fourth. In September 2026 the household survey counted 9.5 million people working for themselves in unincorporated businesses, down from 9.7 million a year earlier, and about 6.9 million who were employees of companies they owned (the second figure not seasonally adjusted). Independent contractors and app workers, who are measured differently, are the subject of Module 10.

The four kinds of employer decide who gets work. A large company posts thousands of openings and screens applicants by software, a small business often hires people the owner already knows, and a

government hires under civil-service rules and annual budgets. In the slowdown of 2025-26, employers adjusted mainly by hiring less rather than by laying people off (Module 3).

1e. From Farm to Factory to the Care Economy

In 1900, 41% of American workers worked in agriculture; by 2000 the share was 1.9%, according to the Agriculture Department's history of the century. In September 2026 agriculture and related industries employed about 2.6 million people, 1.6% of all the employed. Agriculture still employed 8.1 million people in January 1948, when BLS's modern series begins, and the number of farms fell 63% between 1900 and the early 2000s. Machinery, fertilizer, and better seeds let each farm worker feed far more people, and the workers moved to towns and factories.

Manufacturing then became the center of the job market. In January 1939, when the payroll records begin, nonfarm payrolls held 29.9 million jobs, 37.1% of them in the goods-producing industries. The war raised that share to 44.0% in November 1943, when factories employed 16.6 million people. Factory employment peaked at 19.6 million in June 1979, when it held 21.7% of all payroll jobs. It never regained that level. Today's factory workforce (table in 1b) is 6.9 million smaller than at the peak, and in September 2026 it stood about 1% below its 2019 level, after the pandemic's fall and recovery.

The service-providing industries, everything from health care and retail to finance and government, held 72.1% of payroll jobs in June 1979 and 86.4% in September 2026, leaving 13.6% to the goods-producing industries: manufacturing, construction, mining, and logging. Over those 47 years service-providing payrolls more than doubled, from 64.9 million to 137.4 million, while goods-producing payrolls fell from 25.2 million to 21.6 million. The newest stage of the shift is the rise of the **care economy**, the paid work of looking after people in health care, home care, child care, and social assistance.

Health care alone employed 8.0 million people in January 1990 and 18.6 million in September 2026, 2.3 times as many, rising from 7.3% to 11.7% of payroll jobs. Measured from December to December, its employment rose in every year from 1991 to 2025 except 2020, through the recessions of 1990-91, 2001, and 2007-09.

1f. Why the Care and Service Jobs Grew

Economists give several reasons for the shift, and they reinforce one another. The first is productivity. Farms and factories found ways to make more with fewer workers, while nursing a patient, teaching a class, or serving a meal still takes much the same human time. The economist William Baumol described the consequence in the 1960s: as wages rise across the economy, work that machines cannot speed up becomes relatively more expensive and takes a growing share of spending and of jobs.

Baumol's example, written with William Bowen in 1966, was live music: a string quartet still needs four players and as much time to play a piece as it did two centuries ago. A quartet's players must still be paid wages that keep up with those of factory workers whose output per hour has multiplied. The effect is known as Baumol's cost disease, and it applies with more force to a nursing home than to a concert hall.

The second is income and age. Richer households spend more of each added dollar on services than on goods, and an older population needs more medical care and more help at home (Module 7 has the population figures). The third is that work once done unpaid at home moved into the market as more women took paid jobs, so that child care, elder care, cleaning, and prepared meals became jobs the statistics count.

The fourth is public money: Medicare and Medicaid, created in 1965, pay for much of the country's health care, which helps keep hiring going when private demand weakens.

The factory side of the shift has its own explanations. Output did not fall with employment: American factories made more in the 2000s than in 1979 with millions fewer workers, because each worker produced more. Trade added a second blow after 2000. Studies of the surge of Chinese imports by David Autor, David Dorn, Gordon Hanson, and coauthors estimate that it cost about a million manufacturing jobs from 1999 to 2011, and up to 2.4 million counting suppliers and local businesses. Those losses were concentrated in the local economies that made the goods China began to export.

The care jobs that grew are not alike. Registered nurses are licensed and well paid, while home health and personal care aides, the largest occupation, are paid near the bottom of the scale, many of them through Medicaid. That split matters in the rest of the course: health care supplied a large share of the job growth of 2025-26 (Module 3), and its jobs range from among the best paid in the economy to among the worst paid.

Worked example — A Hundred American Workers

Shrink the 159.0 million payroll jobs of September 2026 to 100, keeping the proportions. Divide each industry's count in the table in 1b by 159.0 million and multiply by 100, rounding to whole workers. **By industry:** 15 work in health care and social assistance (24.0 ÷ 159.0 × 100 = 15.1) and 15 in government (23.3 ÷ 159.0 × 100 = 14.7). Another 14 work in professional and business services, and 11 in leisure and hospitality, 8 of them in restaurants and bars. Retail has 10, manufacturing 8, finance, insurance, and real estate 6, and construction 5. The last 16 divide into 8 in transportation, warehousing, wholesale trade, and utilities, and 8 in private schools and colleges, information, other services, and mining and logging. **By employer:** the 15 government workers divide, in the proportions of 1d, into 10 local (5 of them in public schools), 3 state, and 2 federal. The 2 federal workers include less than half a postal worker (0.6 ÷ 159.0 × 100 = 0.4). The other 85 work for private employers. Applying the Office of Advocacy's 45.9% to them is an illustrative assumption, because its count comes from a different source. On that assumption, about 39 work for firms with fewer than 500 employees and about 46 for larger firms, and 1 of the 46 works for Walmart (1.6 ÷ 159.0 × 100 = 1.0). **By occupation:** about 8 of the 100 are home health and personal care aides, retail salespersons, or fast food and counter workers ((4.3 + 3.9 + 3.9) ÷ 159.0 × 100 = 7.6). That is an approximation, since the occupational count is from May 2025. **Outside the hundred:** another 6 people work for themselves in unincorporated businesses, work that appears on no payroll (9.5 ÷ 159.0 × 100 = 6.0). The result: in a typical hundred American workers, almost twice as many work in health care and social assistance as in manufacturing. More work for local governments than in all of manufacturing, and about as many serve food and drink as make things.

Module 1 Key Points

Who Works

• The labor force was 170.3 million in September 2026; payrolls held 159.0 million jobs, since one survey counts people and the other jobs.

• Health care and social assistance, with 24.0 million jobs, is the largest private industry, more than half again as large as retail.

• The largest occupation is home health and personal care aide, 4.3 million workers; eight of the ten largest pay below the average.

• Small businesses, those under 500 employees, employ 45.9% of private-sector workers; Walmart, the largest company, employs about 1.6 million Americans.

• Manufacturing peaked at 19.6 million jobs in June 1979; service-providing industries now hold 86.4% of payroll jobs.

Module 1 Quiz

Check Your Understanding

1. Which is the largest private industry in the United States by payroll jobs?

A) Retail trade, with about 15.5 million jobs
B) Health care and social assistance
C) Manufacturing
D) Professional and business services, the group that includes temporary-help agencies and building cleaners

2. How does manufacturing employment in September 2026 compare with its history?

A) It is back above its June 1979 peak of 19.6 million
B) It has fallen by half since 2019
C) It is 6.9 million below its 1979 peak and close to its 2019 level
D) It has grown by a million jobs since the 2025 tariffs

3. Which is the largest single occupation in the United States, by BLS's May 2025 count?

A) Home health and personal care aides
B) Retail salespersons
C) Registered nurses
D) Laborers and freight, stock, and material movers

4. What share of private-sector workers do small businesses, those with fewer than 500 employees, employ?

A) About 64%, nearly two in three
B) About 15%, roughly one in seven
C) About 28%, a little over a quarter
D) 45.9%

5. What explanation for the growth of service and care jobs does the module attribute to William Baumol?

A) Services pay more, so workers chose them
B) Trade sent factory jobs abroad
C) Work that machines cannot speed up grows costlier and takes more jobs
D) Federal rules have capped the hours that nurses and teachers may work, so employers must hire more of them for the same work

Module 2 — Counting Work

How the Jobs Numbers Are Made, and Why They Strained

Recommended Reading / Reference

Book: Zachary Karabell, *The Leading Indicators: A Short History of the Numbers That Rule Our World* (2014), how the unemployment rate and the other headline statistics were invented, and what they leave out

Reference: BLS, the Technical Note to *The Employment Situation*, and its April 2026 report to the Appropriations Committees on modernizing the Current Population Survey, the sources for how the surveys work and where they are strained

2a. The Two Surveys

Every month BLS runs two large surveys that answer different questions (table). The **payroll survey** asks employers how many people were on their payrolls in the pay period that includes the 12th of the month, how many hours they worked, and what they were paid. It counts jobs, so a person with two jobs is counted twice, and it leaves out the self-employed, farm workers, and people employed by households, such as nannies. Its large sample and its use of payroll records make it the more precise of the two for counting jobs.

The **household survey** asks people. Census Bureau interviewers reach the households in its sample by telephone and in person and ask what each adult did in the week that includes the 12th. It is the source of the unemployment rate and of most of what the statistics say about who works, by age, sex, race, education, and birthplace. Its sample is the same size as it was in 1981, although the population has grown 61% since then. Each response now stands for about 3,500 people, against about 2,100 twenty years ago, BLS told Congress in April 2026.

Measure	Who answers	Sample	Period covered	What it gives
Payroll survey (CES)	Employers, from payroll records	About 119,000 businesses and agencies at 622,000 worksites, about 26% of payroll jobs	Pay period including the 12th	Jobs by industry, hours, and pay
Household survey (CPS)	People, interviewed for BLS by the Census Bureau	About 60,000 eligible households	Week including the 12th	Unemployment, participation, who works, the self-employed
JOLTS	Employers	About 21,000 establishments	Openings on the month's last business day; flows over the month	Openings, hires, quits, layoffs
Weekly claims	State unemployment-insurance offices	Every claim filed: a count, not a sample	The week	New claims and continuing claims

BLS technical notes to *The Employment Situation* and the JOLTS release (October 2026); Labor Department weekly claims release. The jobs report usually comes out on the first Friday of the month at 8:30 a.m. Eastern time; claims come out every Thursday.

The household survey's definitions decide who counts. A person is **employed** who did any paid work at all in the survey week, even an hour, or worked at least 15 hours unpaid in a family business, or had a job but was away from it because of illness, vacation, or bad weather. A person is **unemployed** who had no job, was available to work, and had actively looked for one in the previous four weeks. People laid off and waiting to be recalled count as unemployed without looking. Everyone else is outside the labor force, and the **unemployment rate** is the unemployed as a share of the labor force.

Each survey has a known margin of error. At 90% confidence, BLS states, the monthly change in payroll jobs is accurate to within about 122,000 either way, and the monthly change in the unemployment rate to within about 0.3 percentage point when the rate is around 6%. A reported gain of 50,000 jobs is therefore statistically indistinguishable from zero, and a move of a tenth of a point in the unemployment rate is noise unless it persists.

2b. The Unemployment Rate and Its Cousins

The official unemployment rate, which BLS calls U-3, answers a narrow question: of the people who have a job or are looking for one, what share are looking? It leaves out three groups that many readers would think of as unemployed. **Discouraged workers** want a job but have stopped looking because they think none is available to them. Other **marginally attached** workers want a job and have looked in the past year, but not in the past four weeks, for reasons such as school or family duties. People working **part time for economic reasons** have jobs but want full-time work and cannot find it, or have had their hours cut.

BLS publishes six measures, from the narrowest, U-1, to the broadest, U-6, which adds all three groups (table). U-6 reached a high of 8.7% in November 2025 and has fallen since. The gap between U-6 and U-3 measures the slack that the headline rate misses, and it tends to widen when employers cut hours before they cut people.

Measure	Who it counts, as a share of the labor force	What it adds
U-1	People unemployed 15 weeks or longer	Only the long-term unemployed
U-2	Job losers and people who completed temporary jobs	Only those who lost a job, not new entrants or quitters
U-3	All the unemployed (the official rate)	The standard definition
U-4	U-3 plus discouraged workers	People who have stopped looking because they expect no job
U-5	U-4 plus all other marginally attached workers	People who want work and looked within the year
U-6	U-5 plus those working part time for economic reasons	People with less work than they want

BLS, *The Employment Situation*, Table A-15. For U-4 the denominator adds discouraged workers, and for U-5 and U-6 all marginally attached workers; involuntary part-timers are already in the labor force. September 2026's values are in the worked example.

Many labor economists prefer a measure that avoids judging who is looking. The **employment rate** is the share of all adults with a job. Computed for people aged 25 to 54, the **prime-age employment rate** also strips out most of the effect of an aging population and of rising college enrollment, because most people in that range are past school and not yet retired. Whether someone worked is also easier for a survey to measure than whether someone searched. Many economists therefore treat it as the cleanest single gauge of how many people who could work have work.

Its record is 81.9%, set in April 2000. It stood at 80.6% in January 2020, fell to 69.6% in April 2020 when the pandemic closed much of the economy, and returned to between 80.5% and 80.9% in most months of 2023 and 2024. Its low for 2026 was 80.2%, in June. The participation rate, the share of all adults in the labor force, moves with both the economy and the population's age, and Module 7 gives its level and history.

2c. Openings, Quits, and Claims as Measures

The two surveys count stocks: how many people have jobs or want them at one point in time. JOLTS measures the flows behind those stocks. A **job opening** counts if a specific position exists, the work could start within 30 days, and the employer is actively recruiting outside its own staff on the last business day of the month. **Hires** are all additions to the payroll during the month. **Separations** divide into quits, which are voluntary departures other than retirements; layoffs and discharges, which the employer initiates; and other separations, such as retirements, transfers, and deaths.

Each flow is also published as a rate. The openings rate is openings divided by employment plus openings, and the hires, quits, and layoffs rates are each divided by employment. Economists read the quits rate as a gauge of workers' confidence, because people quit mostly when they have another job lined up or expect to find one quickly. The ratio of openings to unemployed people shows how hard employers must compete for workers, and the hires rate shows how easily someone looking can get in.

Weekly jobless claims are the fastest measure. Every Thursday the Labor Department reports the **initial claims**, new applications for unemployment insurance, filed in the previous week, and the **continuing claims**, people still claiming benefits a week earlier. Because they count every claim rather than a sample, claims have no sampling error. They have two limits: many jobless people never claim, because they quit, are new to the labor force, or lack enough work history, and each state sets its own rules (Module 9). A rise in initial claims signals layoffs, while a rise in continuing claims without one signals that people who lose jobs are taking longer to find new ones.

2d. Revisions and Benchmarks

The payroll figure published on the first Friday is an estimate built from the reports that have arrived by then. BLS revises each month twice more, in the next two jobs reports, as late reports come in. The revisions are part of the design: the first estimate trades accuracy for speed.

Once a year BLS replaces its sample-based estimate of March employment with a near-complete count taken from the unemployment-insurance tax records that almost every employer files, and it adjusts the months between. The difference, the **benchmark revision**, is BLS's own rough measure of the survey's total error. Over the previous ten years it averaged 0.2% of payroll employment, up or down, BLS states.

The hardest jobs to count are at businesses that have just opened or just closed. A new firm is not yet in the sample, and a closed one simply stops answering, which at first looks the same as a firm that is late. BLS fills the gap with its **birth-death model**. The model assumes that closed firms' jobs moved like those of surviving firms of the same kind, then adds a statistical estimate, drawn from five years of tax records, of jobs created by openings net of those lost to closings. A model built on the past tends to miss when the economy turns, and the 2025 benchmark showed that it had overcounted.

Its preliminary estimate for 2025, published September 9, 2025, cut March 2025 employment by 911,000. The final revision, published February 11, 2026, was 898,000 jobs, seasonally adjusted, and in the same release BLS changed the birth-death model to draw on current sample information each month. After that release and later revisions, payroll growth in 2025 stands at 116,000, against 584,000 in the count before the benchmark. Jerome Powell, then the Fed's chair, had said on December 10, 2025 that monthly payroll gains were being overstated by about 60,000.

The 2026 preliminary benchmark, published August 28, 2026, cut March 2026 employment by 79,000, or 0.1%, inside the ten-year average. The final figure is due with the January 2027 jobs report on February 5, 2027.

2e. The Strain of 2025-26

On August 1, 2025, hours after a jobs report that revised May and June down by a combined 258,000, President Trump fired the BLS commissioner, Erika McEntarfer, and accused her of manipulating the figures. On August 11 the President nominated E.J. Antoni, an economist at the Heritage Foundation and a critic of the bureau. Antoni suggested suspending the monthly jobs report and relying on quarterly data in the meantime. The White House withdrew the nomination on September 30, 2025, after opposition that included Republican senators.

The government shutdown that ran from October 1 to November 12, 2025, 43 days, stopped data collection. BLS published no October jobs report. The November report, released December 16, 2025, carried October's payroll count but no October household data, which were never collected and will not be, a first in the bureau's history, Reuters reported.

The shutdown also delayed the Census Bureau's annual population estimates, which BLS uses to weight the household survey to the size and makeup of the population, so the new weights arrived a month late, with the February 2026 figures published in March, and January's figures were revised to include them. Applied to December 2025, they cut the measured labor force by 1.4 million and employment by 1.4 million and lowered the participation rate by 0.4 point, without changing the unemployment rate. The new estimates had fewer men aged 25 to 54 and more women 65 and older, and they reflected a decline in net immigration. Comparisons of household-survey levels across the break are therefore unreliable.

Underneath were longer-running strains. Response to the household survey fell from the low 90s to the upper 60s, in percent, over 15 years, and in November 2025, the first month collected after the shutdown, it was 64.0%. BLS told Congress in April 2026 that a net change of fewer than 50 responses can now move the unemployment rate by 0.1 point. Departures and a hiring freeze in 2025 left more than a third of senior positions vacant at the start of 2026, Reuters reported. In 2025 the bureau also cut the number of prices it collects for the consumer price index and stopped publishing about 350 producer price indexes. The administration disbanded the outside committees that advised it on methods.

In 2026 the bureau gained a confirmed leader and a plan. Brett Matsumoto, a BLS price economist since 2015, was confirmed by the Senate on August 7, 2026, by 51 votes to 47, and took office on August 11 as the 17th commissioner. He pledged to be the bureau's only political appointee and to leave changes of method to career staff, announced in advance. BLS has also proposed letting households answer the survey online, tested first in a parallel survey of 45,000 households a month for about 18 months at about $60 million a year. Without that test, it warned, estimates such as the unemployment rate would be at considerable risk.

2f. The Private Data

Private companies now publish job counts of their own, built from the records that pass through their systems. Automatic Data Processing (ADP), the largest payroll processor, publishes a monthly count of private jobs from its clients' payrolls with Stanford University's Digital Economy Lab. Revelio Labs, a labor-data firm, began publishing an estimate of total employment during the fall 2025 shutdown, built by its

own account from online employment records and job postings. The job site Indeed publishes a daily index of its postings.

For September 2026, ADP reported 90,000 new private jobs on September 30, and Revelio reported 56,900 jobs in all on October 1, the day before BLS published its count (worked example).

The private series measure different things in different ways, and none is a sample designed to represent the country. ADP counts only its clients, Revelio infers jobs from records that workers and firms choose to post, and Indeed counts advertisements rather than vacancies. In 2026 they tracked the official count rather than contradicting it: all showed modest growth, led by health care, with little turnover. They differed from BLS and from one another by tens of thousands a month, about the size of the monthly change itself in an economy that needs few new jobs to keep unemployment steady (Module 3).

2g. Can the Jobs Numbers Still Be Trusted? The Cases as Their Advocates Make Them

The case that the numbers can be trusted: its advocates, among them many economists who use the data, start from what has not happened. No evidence of manipulation has surfaced, Reuters reported in August 2026, and the estimates are produced by career statisticians under procedures that keep them secret until release. The political check worked when the White House withdrew a nominee who had proposed suspending the report, and a career economist from inside the bureau now leads it. The 2026 benchmark was small once the birth-death model was fixed, the private counts and the claims data move with the official ones, and revisions are how a fast survey is supposed to work.

The case that the machinery is degrading: its advocates, among them the Center for American Progress, a progressive policy institute, start from capacity. A commissioner was fired after a weak report, and the committees that reviewed the bureau's methods were disbanded. The household survey reaches fewer respondents every year, its October 2025 month is missing, and its population weights had to be reset in 2026. The Center put BLS's funding for fiscal 2025 at $636 million, more than 22% below fiscal 2010 after inflation. On this view even an honest agency cannot measure the economy precisely with a thinning staff and a sample fewer people answer.

What the evidence says: no altered figures have been found, and the benchmark, the strongest test of the payroll survey, shrank by more than nine-tenths after the model change (2d). The payroll survey is checked every year against tax records covering nearly every employer, so its errors are found and corrected. The household survey has no such anchor. Economists at the Atlanta Fed found in April 2026 that its response rate fell almost 5 points from September to November 2025, and that households brought into the survey since the shutdown keep answering at lower rates. They warned that this could bias the measured unemployment rate downward and suggested reading two-month averages.

The course's reading, stated once: the numbers are honest, and what has weakened is their precision, unevenly. The payroll count remains sound over a year, because the tax records correct it, though its first monthly estimates are rough. The household survey is the weak part: a move of a tenth of a point in the unemployment rate now says little on its own, and the risk is erosion of the bureau's capacity rather than falsification. A single month now carries less information than it did. Three-month averages of both surveys, read beside the claims data, carry most of what the surveys still know.

Worked example — The September 2026 Jobs Report, Read the Way the Market Reads It

The report came out at 8:30 a.m. on Friday, October 2, 2026. Every input below is a published figure, not an assumption. A market reader takes it in five steps. **1. The headline against the forecast.** Payrolls rose 29,000, against about 90,000 expected by economists polled by the London Stock Exchange Group: a miss of 61,000 (29,000 − 90,000). Private payrolls rose 46,000, against 85,000 expected, and government payrolls fell 17,000 (46,000 − 17,000 = 29,000). **2. The revisions.** July was revised from +21,000 to −10,000 (−31,000) and August from +162,000 to +133,000 (−29,000), together −60,000. The level of payroll employment therefore came in 121,000 below the level implied by the earlier figures and the forecast (−61,000 − 60,000). **3. The trend.** The three-month average fell from about 71,000 a month to about 51,000. Before the report it was June's +31,000, July's +21,000, and August's +162,000, divided by 3. After it, the three months were −10,000, +133,000, and +29,000. **4. The noise.** With BLS's 90% margin of about 122,000, September's true change probably lies between a loss of 93,000 and a gain of 151,000 (29,000 ± 122,000), so even the miss is inside the survey's error. **5. The household side.** The unemployment rate edged up to 4.2% (Module 3), but the broader measures improved: U-6 fell to 7.6% from 7.7% in August and 8.1% a year earlier, and the prime-age employment rate rose to 80.7% from 80.4%. Pay comes next in the report (Module 4), and so does participation (Module 7). Vanguard's Adam Schickling, quoted by Fox Business that day, called the labor market resilient but not accelerating. Whether 29,000 jobs a month is enough to hold unemployment steady is the breakeven question of Module 3.

Module 2 Key Points

Counting Work

• The household survey still samples about 60,000 households, as in 1981; each response now stands for about 3,500 people.

• U-6, which adds discouraged, marginally attached, and involuntary part-time workers, was 7.6% in September 2026.

• The prime-age employment rate, 80.7% in September 2026, avoids judging who is looking and most effects of aging.

• The 2025 benchmark cut 898,000 jobs; payroll growth in 2025 is now 116,000, against a first count of 584,000.

• The October 2025 household survey was never collected, a first; response has fallen from the low 90s to the upper 60s, in percent.

• The course's reading: the numbers are honest but noisier, and the household survey's monthly changes are the weakest part.

Module 2 Quiz

Check Your Understanding

1. Which measure do many labor economists treat as the cleanest single gauge of how many people have work?

A) The official unemployment rate, the headline figure
B) The prime-age employment rate
C) U-6
D) The participation rate of everyone 16 and over, retirees included

2. Why does the household survey now detect month-to-month changes less precisely than it once did?

A) Its sample is still about 60,000 households, as in 1981, while response has fallen, so each answer counts for more people
B) BLS halved the sample in 2025 to save money
C) It switched to online answers in 2026
D) The Census Bureau stopped weighting it to the population

3. What was the final benchmark revision to payroll employment for March 2025, published February 11, 2026?

A) About 79,000 fewer jobs, a tenth of a percent
B) About 258,000 fewer, the May-June revision
C) About 584,000 more, the first count of 2025 growth
D) 898,000 fewer

4. What happened to the household survey for October 2025?

A) It was never collected
B) It was collected late and published in January 2026
C) It was replaced for that month by state unemployment-insurance counts
D) It was done by telephone only, with half the usual sample

5. What is the course's reading of whether the jobs numbers can still be trusted?

A) They have been altered for political ends
B) Fully, since the small 2026 benchmark and the private data prove the surveys are as accurate as ever
C) Not until the planned online survey has fully replaced the interviewers
D) They are honest but noisier, mainly in the household survey

Module 3 — The Cycle

From the Great Resignation to the Low-Hire Market

Recommended Reading / Reference

Book: Steven J. Davis, John C. Haltiwanger, and Scott Schuh, *Job Creation and Destruction* (1996), the study that showed how large the flows of jobs created and destroyed are beneath every net change, and how they move over the cycle

Reference: BLS, the *Job Openings and Labor Turnover Survey* (monthly), and the Federal Reserve's policy statements, projections, and minutes, the sources for the flows and for the Fed's reading

3a. How Labor Markets Tighten and Loosen

A labor market tightens when employers want more workers than are available and loosens when the reverse is true. Four flows show which way it is moving. Employers post more **openings** when demand for what they sell grows, and **hires** follow, so unemployment falls as people looking for work find it. Workers **quit** more often when jobs are easy to find, because most people who quit are moving to another job. Employers **lay off** workers when demand falls, and the people laid off join the unemployed.

In a tight market, openings are plentiful and quits are high, employers compete for workers by raising pay, and the unemployed find work quickly. In a loose one, openings are scarce, workers hold on to the jobs they have, and the unemployed search for months. Layoffs rise sharply only in a downturn. Most of the time they are a small and steady flow, so changes in hiring do most of the work of moving unemployment up or down.

Economists summarize the link between openings and unemployment in the **Beveridge curve**, named for the British economist William Beveridge. Plotted with the unemployment rate on one axis and the job openings rate on the other, the months trace a curve that slopes downward: when openings are high, unemployment is low. Changes in demand move the market along the curve. A shift of the whole curve outward, with more openings at every level of unemployment, means that employers and job seekers are matching less efficiently, because the unemployed lack the skills employers want, live in the wrong places, or search less.

The curve is steep where openings are plentiful. There, a fall in demand can remove many vacancies while adding few unemployed, because employers first stop recruiting for posts they had not filled. Where openings are scarce, the curve is flat, and a further fall in demand shows up mainly as more unemployment.

3b. 2020 to 2025: The Collapse, the Quits Boom, and the Cooling

Payrolls fell by 21.9 million in March and April 2020, as states closed businesses and people stayed home (table). Federal relief payments and the reopening of the economy lifted demand, and by June 2022 payrolls were back above their February 2020 level. Openings outran the people available to fill them and in March 2022 reached the highest level since the openings survey began in December 2000.

Measure	February 2020	April 2020	Spring 2022
Unemployment rate	3.5%	14.8%	3.7% (March and April)
Unemployed people	5.8 million	23.1 million	6.0 million (March)
Job openings	7.0 million	4.6 million	12.3 million (March)
Openings per unemployed person	1.2	0.2	2.0 (March)

BLS household survey and JOLTS, seasonally adjusted, as revised to October 2026, via Federal Reserve Economic Data (FRED), the St. Louis Fed's database.

Workers used the shortage to move. Quits reached 4.5 million in April 2022, 3.0% of employment, both records, and about 47.6 million quits were recorded in 2021 and 50.6 million in 2022 (some people quit more than once). Commentators called it the Great Resignation, but most people who quit were not leaving work. They were moving to jobs that paid more, and job switchers' raises outpaced those of workers who stayed. The hires rate, the month's hires as a share of employment, reached 4.6% in July and November 2021, its highest outside the reopening months of 2020.

The cooling began as the Fed raised interest rates from March 2022 to July 2023 to bring down inflation. Openings fell by about 3.8 million from March 2022 to December 2023, while the number of unemployed rose by only about 300,000. That was the steep part of the Beveridge curve at work: employers cut vacancies before they cut workers. In April 2023 the unemployment rate reached 3.4%, the lowest since May 1969.

From 2023 the market loosened slowly. Payrolls grew by about 210,000 a month in 2023 and 122,000 in 2024, and about 10,000 a month in 2025 after the benchmark revision (Module 2). Openings fell to 7.3 million by December 2024 and 6.6 million by December 2025. The hires rate fell back to its 2010-12 level by the end of 2024 and has stayed there. The unemployment rate rose to 4.2% in July 2024, eased to 4.0% in January 2025, and climbed to a cycle high of 4.5% in November 2025, first published as 4.6%.

3c. The 2026 Market

Payroll growth picked up in 2026 to an average of 68,000 a month from January to September, though single months swung by more than 100,000 in both directions (table). The unemployment rate has stayed between 4.1% and 4.3% since March, below the cycle high of November 2025.

Month, 2026	Payroll change	Unemployment rate
January	+160,000	4.3%
February	−156,000	4.4%
March	+214,000	4.3%
April	+148,000	4.3%
May	+63,000	4.3%
June	+31,000	4.2%
July	−10,000	4.1%
August	+133,000	4.1%
September (first estimate)	+29,000	4.2%

BLS, *The Employment Situation*, payroll levels as revised in the release of October 2, 2026, via FRED. July and August are revised; September will be revised on November 6 and December 4, 2026.

The flows show what kind of market this is. In August 2026, the latest month, employers had 7.1 million openings, about one for every unemployed person, and made 5.2 million hires (BLS, September 29, 2026). The hires rate, 3.3%, equals its level of 2010-12, the slow years after the financial crisis, and is below its year-end level in every year from 2014 to 2019, 3.7% to 3.9%. Quits, at 1.9% of employment, were below the 2.3% to 2.4% of 2019, a sign that workers see few better jobs to move to. Layoffs and discharges, at 1.0%, were below 2019's 1.1% to 1.3%.

The weekly claims confirm that few people are losing jobs. Initial claims were 199,000 in the week ending October 10, and continuing claims were 1.71 million in the week ending October 3, by the Labor

Department's release of October 15, 2026. The insured unemployment rate, continuing claims as a share of the jobs covered by unemployment insurance, was 1.1%.

The cost of this market falls on those trying to get in. Few workers lose jobs, but those who do, and those entering or returning to the labor force, wait longer to find one. In September 2026, 1.9 million people had been unemployed for 27 weeks or more, 27.1% of all the unemployed, up from 21.1% in January 2025. Economists call the pattern low-hire, low-fire.

The best-known recession signal is quiet. The **Sahm rule**, devised by the economist Claudia Sahm, signals a recession when the three-month average of the unemployment rate rises half a point above its low of the previous twelve months. Its real-time reading in September 2026 was 0.00. The rule is not infallible: it crossed the threshold in July 2024, reaching 0.53, and no recession followed.

3d. Who Added and Lost Jobs

Industry	Change, December 2025 to September 2026	Note
Health care	+258,000	About 29,000 a month, against 32,000 a month in 2025
Construction	+92,000	September: +11,000, led by nonresidential specialty trades
Manufacturing	+72,000	After a loss of 113,000 in 2025
Retail trade	+66,000	After a loss of 47,000 in 2025
Government	−22,000	Federal −40,000
Information	−103,000	Down 3.6%, the weakest industry; 12% below its November 2022 peak
Financial activities	−129,000 since May 2025	Insurance carriers and related activities −90,000
All industries	+612,000	Payroll jobs

Financial activities is measured from its May 2025 level. BLS, *The Employment Situation*, Table B-1, via FRED; Atlanta Fed, Lei Fang, October 13, 2026, for health care's monthly pace and share.

The gains were narrow. Health care alone supplied about 42% of all the jobs added from December 2025 to September 2026. Excluding health care, payrolls fell about 23,000 a month in 2025 and 46,000 a month in the second half of that year, by the Atlanta Fed's count. In 2026, 10 of 13 major industries added jobs, and government, information, and financial activities lost them.

The losses were concentrated in office and public work: information (software publishing, telecommunications, and data processing), finance, and government. Computer systems design, a gauge of technology services, employed 128,000 fewer people in September 2026 than at its March 2023 peak, 5.2% fewer. How much of this white-collar weakness reflects AI is the question of Module 5.

Federal civilian employment fell by 328,000 from January 2025 to September 2026, by the payroll survey's count, which includes the Postal Service. The largest drop came in October 2025, when 162,000 federal jobs came off the payrolls as employees who had accepted the deferred-resignation offer of early 2025 left, BLS reported; the offer had kept them on the payroll until the fiscal year ended in September. State and local governments together added jobs over the same period, so total government employment fell far less.

3e. Breakeven Job Growth

Whether 68,000 jobs a month is a lot or a little depends on how fast the labor force is growing. **Breakeven job growth** is the monthly job gain that holds the unemployment rate steady: enough new jobs for the people joining the labor force, net of those leaving it. If jobs grow faster than breakeven, unemployment falls, and if slower, it rises. Breakeven depends on the growth of the adult population, through immigration and young people coming of age, and on the share of adults who want to work, which falls as the population ages.

When immigration was high, breakeven was high: about 250,000 a month at its peak in 2023, by the Dallas Fed's estimate. As net immigration fell from 2025 (Module 7 gives the estimates), breakeven fell with it. The St. Louis Fed put it at about 153,000 in April 2025. The Dallas Fed, in research published March 31, 2026, put it at about 10,000 by July 2025 and an average of about −3,000 a month from August to December 2025.

Estimates for 2026 differ mainly in what they assume about immigration. Federal Reserve Board economists estimated on April 2, 2026 that breakeven would be under 10,000 a month in 2026, down from about 155,000 in 2023-24 and 85,000 in 2025. The St. Louis Fed's range, published March 24, 2026, runs from 15,000 to 87,000 under different immigration scenarios. The Atlanta Fed's jobs calculator, with its default assumptions, gives about 68,000.

A low breakeven reverses the usual reading of the jobs report. A monthly gain of 29,000, a weak figure in 2023, can hold unemployment steady in 2026, and a monthly loss need not mean a recession. The Fed Board economists warned that declines of about 100,000 in a month are possible even with the economy at its potential, the output it can sustain without raising inflation. The worked example runs the arithmetic.

3f. The Fed's Reading

Congress gave the Fed two goals in 1977, maximum employment and stable prices, which together form its **dual mandate**, and since 2012 it has defined stable prices as inflation of 2% a year. The Fed pursues both by setting a target range for the federal funds rate, the rate banks charge one another for overnight loans, which steers other interest rates. The rate is set by the Federal Open Market Committee, led since May 22, 2026 by Kevin Warsh as Fed chair. His predecessor, Jerome Powell, remains a governor.

In 2026 the two goals pulled apart. The war that began with strikes on Iran on February 28, 2026 closed the Strait of Hormuz to most shipping and drove up the price of oil. Energy prices rose 20.4% in the year to September and gasoline 34.2%. Consumer prices as a whole rose 3.7%, while core prices, which exclude food and energy, rose 2.6% (BLS, October 14, 2026). A central bank cannot reopen a strait, but it can try to stop a rise in energy prices from spreading into wages and other prices.

On September 16, 2026, the committee raised its target range by 25 basis points, a quarter of a percentage point, to 3.75-4.00%, by 12 votes to none. It was the first rise since July 2023. The committee's statement said job gains had matched the growth of the workforce and the unemployment rate had changed little. The members' median projection put unemployment at 4.1% at the end of 2026, 2027, and 2028, against 4.3%, 4.3%, and 4.2% in their June projections. Seventeen of the eighteen participants saw the risks to unemployment as balanced, against ten in June.

The minutes of that meeting, released October 7, 2026, showed participants judging the labor market stable and close to maximum employment, and a majority seeing job gains modestly outpacing the growth of the labor force. Several pointed to unusually low dynamism: low hiring and layoffs, a low rate at which the

unemployed find jobs, and long-term unemployment that stays high. Almost all saw the risks to employment as smaller than before, while the risks to inflation still leaned upward. The committee meets next on October 27-28, 2026.

The Fed's reading rests on breakeven. If the labor force is barely growing, a steady unemployment rate beside 3.7% inflation argues for higher rates. If the slow hiring reflects weak demand instead, the September rise will look like a mistake.

3g. Is the Market Weakening, or Are There Just Fewer New Workers? The Cases as Their Advocates Make Them

The case that there are just fewer new workers: its advocates, among them economists at the Fed Board and the Dallas Fed and the committee's majority, argue that demand for workers is sound and the supply of them has stopped growing. With immigration down and the population aging, breakeven is near zero, so the job gains of 2026 are enough to keep unemployment steady, and it has stayed steady. Layoffs are low, and Chair Warsh said on September 16 that the four-week average of jobless claims was at a level consistent with full employment. U-6, the broadest measure of slack, has fallen since late 2025 (Module 2). Mary Daly, president of the San Francisco Fed, has argued that an economy adding no jobs at all can be consistent with full employment.

The case that the market is weakening: its advocates, among them Governor Christopher Waller, who dissented in favor of a rate cut in January 2026, argue that a shrinking supply of workers is hiding falling demand for them. Hiring has dropped to the rates of the slow recovery after 2009, and low quits show workers reluctant to move. The share of the unemployed out of work for half a year or more has risen by six points. Growth is narrow, and without health care payrolls fell through 2025. Participation fell over the year to September 2026 (Module 7), and people who stop looking are not counted as unemployed, so the steady rate flatters the market. Diane Swonk, chief economist of the accounting firm KPMG, read the data in August 2026 as demand and supply falling together.

What the evidence says: the two cases predict different things. If supply is the story, openings should hold up and unemployment should stay flat at low job gains, and both have happened. The openings rate rose from 4.13% in December 2025 to 4.33% in August 2026, and unemployment has barely moved. The Atlanta Fed's count of openings per unemployed worker rose from 0.93 to 0.98 in the year to August 2026. If demand is the story, long-term unemployment should drift up while hiring stays depressed, and that has happened too. The longer spells also fit a market where employers fill fewer posts for any reason. Falling response to the household survey could bias the measured unemployment rate downward (Module 2), which cuts toward the case for weakness. The fall in participation cuts the other way: more than half of it came from the new population weights (Module 2).

The course's reading, stated once: the two cases describe the same market from different sides, and the evidence supports each on its own ground. On the headline, the case for supply holds: with the labor force barely growing, the 2026 job gains keep unemployment steady, and layoffs, claims, and the Sahm rule show no recession under way. On the experience of looking for work, the case for weakness holds: hiring at the rates of 2010-12 and a rising share of long-term unemployed mean that a job, once lost or never held, is hard to get. The market is not weakening in the way that comes before a recession, but it has become hard to enter, and its cost falls on the people trying to get in rather than on those already working.

Worked example — Why 29,000 Jobs a Month Can Hold Unemployment Steady

The rule: the unemployment rate stays flat when employment grows as fast as the labor force, so breakeven equals the monthly growth of the labor force × (1 − the unemployment rate). Labor-force growth is the new adults × the share who join the labor force, minus the workers lost as the population ages. The population inputs below are illustrative assumptions chosen to fit each year, not official estimates. **Aging, both years:** assume the baby boomers' retirement lowers the participation rate by 0.15 point a year. On about 276 million civilian adults aged 16 and over (September 2026), that removes about 35,000 people a month from the labor force (276 million × 0.0015 ÷ 12 = 34,500). **2023:** assume the adult population grew by 350,000 a month, swollen by immigration, and that 62% of the new adults joined the labor force. Labor-force growth is 350,000 × 0.62 − 35,000 = 182,000 a month, and with unemployment at 3.6%, breakeven is 182,000 × 0.964 = 175,000. **2026:** assume the adult population grows by only 80,000 a month, roughly the young people coming of age less deaths among adults, with net immigration near zero. Labor-force growth is 80,000 × 0.62 − 35,000 = 14,600, and with unemployment at 4.2%, breakeven is 14,600 × 0.958 = about 14,000 a month. Both results fall inside the range of published estimates in 3e. **The consequence:** in 2023, 29,000 jobs a month against a breakeven of 175,000 would have added about 146,000 people a month to the unemployed, 1.75 million a year. That would have raised the unemployment rate by about a point a year (1.75 million ÷ a labor force of about 167 million = 1.0%). In 2026 the same 29,000 against a breakeven of 14,000 takes about 15,000 people a month out of unemployment, 180,000 a year, lowering the rate by about 0.1 point a year (180,000 ÷ 170.3 million). **The check:** at the actual 2026 pace of 68,000 a month, the model predicts a fall of about 0.4 point a year ((68,000 − 14,000) × 12 ÷ 170.3 million). The rate in fact fell 0.2 point in the seven months from February to September, a pace of about 0.3 point a year. **The sensitivity:** each extra 50,000 adults a month adds about 30,000 to breakeven (50,000 × 0.62 × 0.958 = 29,700), which is why estimates that differ on immigration differ so widely.

Module 3 Key Points

The Cycle

• Payrolls rose 68,000 a month on average from January to September 2026; unemployment, 4.2% in September, stayed below November 2025's 4.5%.

• The hires rate, 3.3% in August 2026, matched 2010-12 while layoffs stayed at 1.0%: a low-hire, low-fire market.

• The long-term unemployed rose to 27.1% of the jobless in September 2026, from 21.1% in January 2025.

• Health care supplied about 42% of the jobs added from December 2025 to September 2026; information and finance lost jobs.

• Breakeven job growth fell from about 250,000 a month in 2023 to near zero as immigration fell and the population aged.

• The Fed raised its rate to 3.75-4.00% on September 16, 2026, judging the market near maximum employment with prices up 3.7%.

Module 3 Quiz

Check Your Understanding

1. Why can a gain of 29,000 jobs a month hold the unemployment rate steady in 2026 when it could not in 2023?

A) Because the payroll survey began counting gig workers in 2026

B) Because layoffs rose in 2026 and pushed many of the jobless out of the labor force altogether

C) Because the labor force is barely growing, with net immigration near zero and an aging population, so few new jobs are needed

D) Because the Fed's rate rise cut the number looking for work

2. What pattern did the JOLTS figures for August 2026 show?

A) Openings hit a record as employers hunted for workers.

B) Hiring was as slow as in 2010-12, while layoffs stayed low.

C) Layoffs reached their highest rate since the 2008-09 recession, while hiring held steady.

D) Quits rose above their 2022 peak.

3. Which industry supplied about 42% of the jobs added from December 2025 to September 2026?

A) Manufacturing

B) Information, as software and data companies hired for the AI build-out

C) Retail trade

D) Health care, with 258,000 jobs

4. What happened to long-term unemployment between January 2025 and September 2026?

A) It fell as the low layoff rate kept most of the jobless out of work for only a few weeks.

B) It doubled to about half of all the unemployed, a record share for the household survey.

C) Its share of the jobless rose to 27.1%.

D) It stayed near one-fifth of the unemployed, as in most years before 2020.

5. What is the course's reading of whether the labor market is weakening?

A) It is not heading into recession, but it has become hard to enter, and the cost falls on people looking for work.

B) It is already in recession, which the revisions will reveal.

C) It is overheating and needs further rate rises to cool it.

D) It is weak only because immigrants left their jobs.

Module 4 — What Work Pays

How Pay Is Set, and Where It Stands

Recommended Reading / Reference

Book: Alan Manning, *Monopsony in Motion: Imperfect Competition in Labor Markets* (2003), the book that revived the study of employers' power over pay and explains why a worker's wage depends on how hard it is to leave

Reference: The BLS releases *Real Earnings* (monthly), *Employment Cost Index* and *Usual Weekly Earnings* (quarterly), and *Productivity and Costs* (quarterly), the sources for most of the figures here

4a. How Pay Is Set

Pay is a price, and like other prices it is set partly by competition. Employers bid for workers, and a worker who is paid less than rivals offer can leave for one of them. Where many employers compete for the same skills, pay is pushed toward what an extra hour of the worker's time adds to the employer's revenue. Competition explains most of why a nurse earns more than a cashier, and why pay rose fastest in 2021-22, when employers were short of workers (Module 3).

Employers also have power over pay where few of them compete for the same workers. Economists call this **monopsony**, a market with one buyer or a few buyers of labor, the mirror image of a monopoly seller. An employer with that power can pay less than a worker adds and still fill most of its jobs, because the workers it underpays have few other places to go. In a study first released in 2017, José Azar, Ioana Marinescu, and Marshall Steinbaum measured concentration in more than 8,000 local markets for particular occupations, using postings on the job board CareerBuilder. They found the average market highly concentrated by the standard of the federal merger guidelines, and posted wages 17% lower in a market at the 75th percentile of concentration than in one at the 25th.

Monopsony does not need a company town. It arises wherever changing jobs is costly: when a worker cannot easily move, holds a license that does not cross state lines, has signed a noncompete agreement, or would lose health coverage by leaving. Each of these frictions lets an employer pay a little less than a rival would. Together they help explain why workers who leave for another employer get larger raises than those who stay (section 4b).

Pay is also bargained and regulated. A union contract sets pay for everyone it covers, and Module 8 weighs what unions do to pay. A minimum wage sets a legal floor that lifts and compresses pay at the bottom, and Module 9 has the federal and state rates and the argument over jobs. Where employers have monopsony power, a floor can raise pay without reducing employment, which is why that argument turns on how much power employers have.

Norms and information shape pay as well. Most large employers set pay in grades and bands, give raises as a percentage of current pay, and survey what similar employers pay, so pay changes slowly and in step across firms. Employers have long known more than applicants about what a job pays, and **pay transparency laws** aim to close that gap by requiring a pay range in job postings. Colorado's took effect first, in January 2021. By the count of Brightmine, a publisher of employment-law guides, updated September 30, 2026, 14 states and the District of Columbia now require ranges in postings. Connecticut's requirement took effect on October 1, 2026, and Delaware's takes effect on September 26, 2027.

4b. Pay in 2026: Five Measures

Average hourly earnings for private-sector workers were $37.81 in September 2026, up 0.1% on the month and 3.0% from a year earlier (BLS jobs report, October 2). With prices up 3.7% over the same twelve months (Module 3), **real** average hourly earnings, meaning earnings adjusted for inflation, fell 0.7% (BLS *Real Earnings*, October 14). Real weekly earnings fell only 0.1%, because the average workweek lengthened slightly. For the average private-sector job, a year of raises bought less than the year before.

Averages can mislead, because they move when the mix of jobs changes: if low-paid workers lose their jobs, average pay rises though no one got a raise. The Federal Reserve Bank of Atlanta's wage growth tracker avoids that by following the same people a year apart in the household survey and taking the median of their pay changes. It stood at 3.9% in September 2026, down from 4.1% in August (October 8). Workers who stayed in the same job gained 3.4%, and those who changed jobs gained 4.7%. That premium for moving, 1.3 points against 1.4 points in August, narrows when fewer employers are bidding for workers, which is what a slow-hiring market means for pay.

The employment cost index, a quarterly BLS survey of employers that holds the mix of jobs fixed, counts benefits as well as wages. Civilian workers' total compensation rose 3.4% in the year to June 2026: wages and salaries 3.2%, benefits 3.8%, and private employers' health benefit costs 6.0% (BLS, July 31). The reading for the year to September is due on October 30, 2026. Health costs that rise faster than wages take a growing share of each dollar an employer spends on a worker (section 4e).

The median full-time wage and salary worker earned $1,251 a week in the second quarter of 2026, up 4.6% on the year and ahead of the 3.9% rise in prices over the same period (BLS, July 21). The median counts only full-time workers and shifts with who holds jobs: when fewer young and low-paid people are hired, the worker in the middle is older and better paid. The five measures do not contradict each other. They count different workers and different kinds of pay, and together they show pay rising 3% to 4.6% a year in 2026, with prices rising faster than the low end of that range.

Measure	Source and frequency	Who and what it counts	What can distort it
Average hourly earnings	Payroll survey of employers, monthly	Every private payroll job; wages only	Shifts in the mix of jobs; overtime
Real average hourly earnings	BLS, monthly	The same, adjusted by consumer prices	The choice of price index
Atlanta Fed wage growth tracker	Household survey, monthly	The same people a year apart; the median change	Small samples; leaves out anyone without a job in both years
Employment cost index	Survey of employers, quarterly	A fixed mix of jobs; wages and benefits	Reported with a lag; leaves out the self-employed
Median usual weekly earnings	Household survey, quarterly	Full-time wage and salary workers	Who holds jobs; hours worked

BLS release documentation; Federal Reserve Bank of Atlanta, Wage Growth Tracker method notes.

4c. Who Gets What

From 2019 to 2025, real hourly pay at the 10th percentile, the worker who earns more than a tenth of all workers and less than the other nine-tenths, rose 15.0%. Pay at the 90th percentile rose 7.4%, according to the Economic Policy Institute (EPI), a Washington think tank aligned with labor (February 5, 2026). The tight market of 2021-23 let low-paid workers switch jobs for raises, and many states raised their minimum wages.

David Autor, Arindrajit Dube, and Annie McGrew named the result “the unexpected compression,” a narrowing of the gap between low and high pay after four decades of widening.

In 2025 the compression stopped. The 10th percentile fell 0.3% in real terms while the median rose 0.8%, in EPI’s count from the household survey, which has no data for October 2025. Dube’s own analysis of data through November 2025 finds that most of the earlier gains at the bottom have held. The two readings agree on the facts: the gap that narrowed in 2019-23 stayed narrow in 2025, and it is no longer narrowing. Over the whole period since 1979, the table shows, the high-paid pulled far ahead, and the recent gains at the bottom have undone only part of that.

Percentile	Hourly wage, 2025	Real growth a year, 2019-24	Real growth, 1979-2025
10th (low-paid)	$14.56	2.4%	28.6%
50th (the median)	$25.67	0.9%	30.0%
90th (high-paid)	$64.52	1.1%	64.1%

Economic Policy Institute (Elise Gould and Joe Fast, February 5, 2026), from the household survey’s earnings questions; 2025 covers eleven months.

Gaps between groups depend on how they are measured. On the Census Bureau’s annual measure, women working full time all year earned 83.9% of men’s median earnings in 2025, up from 80.6% in 2024 (September 15, 2026). On BLS’s weekly measure for full-time workers, women’s median was 82.0% of men’s in the second quarter of 2026, $1,131 a week against $1,380. The annual figure also captures differences in weeks worked over the year, which the weekly one does not. Black full-time workers earned a median $1,029 a week in the second quarter of 2026, against $1,268 for white workers, about 81%. Neither gap adjusts for occupation, age, or education, and studies that do adjust find smaller gaps that do not disappear.

At the top, the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO), the main federation of American unions, found that chief executives of companies in the S&P 500 stock index were paid an average of $22.8 million in 2025, up 21%, not counting Elon Musk’s Tesla award, valued at $158.3 billion. That was 312 times a typical worker’s pay (August 13, 2026). EPI found a ratio of 325 to 1 at the 350 largest firms, against 20.6 to 1 in 1965 (September 17, 2026). The two differ because they use different companies and different measures of what executives realize from stock awards, and both ratios rose in 2025.

4d. The Labor Share

The **labor share** is the part of what the economy produces that goes to workers as pay and benefits, with the rest going to owners as profits, interest, and rent. On BLS’s measure for the nonfarm business sector, which counts part of the self-employed’s income as labor, the share was 52.8% in the second quarter of 2026 on revised figures, the lowest since the series began in 1947 (September 3, 2026). On the measure of the Bureau of Economic Analysis (BEA) for the whole economy, employees’ compensation was 50.9% of gross domestic income, the economy’s output counted as the incomes it pays, in 2025. That compares with 58.4% in 1970, the series’ high.

Why it fell is disputed. The candidates are automation and software that replace routine work, imports from low-wage countries, the decline of unions, and the rise of a few dominant firms with high profit margins. One influential study, by David Autor and four coauthors (2020), found the fall concentrated in industries where sales shifted toward a few large, high-profit firms. Each explanation accounts for part of the decline, and they reinforce one another.

The share also moves with the business cycle. It rises in recessions, when profits fall faster than pay, as in 2020, when BEA's measure reached 54.6%. Part of the 2026 low therefore reflects strong profits rather than weak pay. It has come with stock prices at records, which is what a shift of income from pay to profits looks like from the owners' side.

4e. Benefits as Pay

Health insurance is the largest part of pay that never appears in a paycheck. In 2025, 53.5% of Americans had coverage through an employer for some or all of the year (Census, September 15, 2026). In KFF's most recent annual survey of employers, for 2025, the average premium for family coverage was $26,993, up 6%, of which workers paid $6,850 and employers the rest (KFF, a health-policy research group, October 22, 2025). Only 61% of firms with ten or more workers offered health benefits, down from 65%, against 97% of firms with 200 or more.

Because one budget covers both, health costs and raises compete. An employer that plans a 3.5% rise in total compensation, with health costs up 6%, has less than 3.5% left for wages. Most studies find that over time much of the cost of employer coverage reaches workers as smaller raises, even though the premium is billed to the employer.

Other benefits depend on the job. In March 2026, 72% of private-industry workers had access to an employer retirement plan, though only 52% took part. Paid sick leave reached 81% of them and paid family leave 49% (BLS, September 25, 2026). Full-time and part-time workers live in different systems: 89% of full-time civilian workers could get medical coverage through their employer, against 23% of part-time workers. Module 9 covers the state paid-leave programs that fill part of the gap.

4f. Has Pay Come Apart from Productivity? The Cases as Their Advocates Make Them

The case that pay has come apart from productivity: EPI argues that from the fourth quarter of 1979 to the second quarter of 2026, the economy's net productivity, output per hour after the wear on equipment, rose 93.7%. Over the same years the hourly pay and benefits of production and nonsupervisory workers, the roughly 80% of private employees who do not manage others, rose 32.7% (updated September 14, 2026). From 1948 to 1979 the two rose roughly together. EPI adjusts both lines by the same price index, so the gap is not an artifact of inflation measures, it says. Its explanation is policy: weaker unions, a minimum wage that lost value, and employer power let pay concentrate at the top while the labor share fell.

The case that the gap is mostly measurement: James Sherk of the conservative Heritage Foundation (2013), the late Martin Feldstein of Harvard (2008), and Michael Strain of the center-right American Enterprise Institute (2022) have argued that the chart sets unlike things side by side. Productivity is an average over all workers, so it should be compared with average pay, not with the pay of the four-fifths of workers below management. The difference between the two is inequality among workers, a separate question from whether pay follows output. Pay should also count benefits and be measured against net output, in the prices of what businesses sell. With consistent measures, Feldstein found productivity rose 1.9% a year from 1970 to 2006 and compensation per hour 1.7%. Sherk found that consistent measures close more than three-quarters of the apparent gap.

What the evidence says: the careful reconciliations split the difference. Anna Stansbury and Lawrence Summers (2017) found that over 1973-2016, a point of faster productivity growth went with 0.7 to 1 point

faster growth in median and average compensation, and 0.4 to 0.7 point for production and nonsupervisory workers. Productivity still lifts pay, they concluded, but other forces have held typical pay down. A BLS study of 183 industries (2017) found productivity outpacing compensation in 83% of them over 1987-2015, with the gap split roughly equally between differences in price indexes and a falling labor share. EPI's own breakdown puts about 78% of its 1979-2019 gap down to inequality among workers and 22% to the falling labor share.

The course's reading, stated once: both sides are partly right, and the dispute is mostly over which worker and which prices belong in the comparison. Measured consistently, average compensation has tracked productivity far more closely than EPI's chart suggests, so most of the headline gap is measurement and the spread of pay among workers. The part that comes from the falling labor share survives every choice of price index, and that share is at a record low (section 4d). That part, not the headline, is the evidence that workers as a group are taking a smaller slice of what they produce.

Worked example — One $25 Job, from the Employer's Cost to the Worker's Pocket

Take a full-time job paying $25.00 an hour for 2,080 paid hours a year, in a state with no income tax: $52,000 a year. The worker's share of a single health plan, $1,440 of a $9,325 premium (KFF's 2025 averages), comes out of pay before tax, so Social Security and Medicare tax of 7.65% is charged on $50,560. The employer pays that tax ($3,868), federal unemployment tax ($42), state unemployment tax (an assumed $300), and workers' compensation insurance (an assumed 1%, $520). It also pays the rest of the health premium ($7,885) and an assumed 3% retirement match ($1,560). The job costs the employer $66,175 a year, $31.81 an hour, 1.27 times the wage. Out of the $52,000, the worker pays $1,440 for the health plan, saves an assumed 3% in the retirement plan ($1,560), and pays $3,868 of Social Security and Medicare tax. After the 2026 standard deduction of $16,100, federal income tax on the remaining $32,900 is $3,700. Take-home pay is $41,432, or $19.92 an hour, 62.6% of what the employer spends. Now add a year of 3.0% raises, with prices up 3.7% (Module 3), premiums up 6%, and tax brackets rising with prices. The wage becomes $25.75 and the employer's cost $68,383, up 3.3%, more than the raise, because health costs rose faster than pay. Take-home pay rises 2.95% to $42,656, which buys what $41,134 bought a year earlier: a real cut of 0.7%, about $298. The employer pays more and the worker can buy less, because the raise was smaller than inflation and the health plan took part of it.

Module 4 Key Points

What Work Pays

• Average hourly pay was $37.81 in September 2026, up 3.0%, but real hourly earnings fell 0.7% because prices rose faster.

• Pay is set by competition, by employers' power where few compete (monopsony), by bargaining, by legal floors, and by norms.

• From 2019 to 2025 real pay at the 10th percentile rose 15.0%, against 7.4% at the 90th; in 2025 the bottom slipped 0.3%.

• The labor share was 52.8% in the second quarter of 2026, the lowest on BLS's record since 1947.

• A family health plan cost $26,993 in 2025, and premiums rising 6% a year take part of every raise.

• Measured consistently, average pay tracks productivity; the part of the gap that survives every measure is the falling labor share.

Module 4 Quiz

Check Your Understanding

1. What did real average hourly earnings do in the year to September 2026?

A) Rose 1.2%
B) Fell 0.7%
C) Rose 3.9%, in line with the Atlanta Fed's tracker
D) Rose 4.6%, because median weekly earnings outpaced prices over the same twelve months

2. Why does the Atlanta Fed's wage growth tracker differ from average hourly earnings?

A) It counts benefits
B) It covers only union members and public employees
C) It is built from employers' payroll records, which include bonuses, overtime, and stock awards
D) It follows the same people a year apart, so changes in who works do not move it

3. What was BLS's nonfarm business labor share in the second quarter of 2026?

A) 54.6%, its 2020 level on BEA's measure
B) 52.8%, the lowest since 1947
C) 50.9%
D) 58.4%, back at its 1970 peak after recovering from the 2020 spike

4. What is the course's reading of the debate over pay and productivity?

A) Most of the gap is measurement and inequality, but the labor share's fall is real.
B) Pay has tracked productivity exactly once benefits are counted, so there is nothing left to explain.
C) The gap is entirely the result of policy choices that weakened unions and let the minimum wage lose value.
D) Productivity figures overstate output so badly that no comparison with pay can be trusted.

5. In the worked example, why does the employer's cost rise faster than the 3.0% raise?

A) Payroll tax rates rose
B) The retirement match doubled
C) Because the health premium rose 6%, faster than pay, and the employer pays most of it
D) Overtime hours were added to the job

Module 5 — AI and Work

What Has Happened So Far

Recommended Reading / Reference

Book: Carl Benedikt Frey, *The Technology Trap: Capital, Labor, and Power in the Age of Automation* (2019), how earlier waves of automation treated workers, from the first factories to the computer, and why the transitions were slow and unequal

Reference: The Stanford Digital Economy Lab's "Canaries in the Coal Mine?" papers (August 2025, updated August 12, 2026) and the Yale Budget Lab's tracker of AI and the labor market, the two most watched measurements

5a. What Exposure Means

The AI in question is mostly **generative AI**: models that write text, code, and images on request, of which ChatGPT, released in November 2022, was the first in wide use. Most claims about it and jobs start from a measure of **exposure**, the share of a job's tasks that AI could do or speed up. Researchers list the tasks in each occupation, usually from O*NET, the Labor Department's database of what each job involves, and judge which ones current models can perform.

Exposure describes tasks, not jobs. A job with half its tasks exposed may need fewer people, or the same people producing more, or people doing different work, and the measure cannot say which. Economists separate **automation**, where AI does a task in place of a person, from **augmentation**, where it helps a person do the task. Anthropic, which sells the Claude models, found that 52% of conversations on its consumer service in November 2025 used AI to help with a task and 45% to do it outright. Through the interface that businesses build into their own systems, about three-quarters was automation (January 15, 2026).

Source and date	What it measures	Estimate
International Monetary Fund (IMF), January 14, 2024	Share of employment exposed to AI	40% worldwide; about 60% in advanced economies, 40% in emerging markets, 26% in low-income countries
ILO, May 20, 2025	Workers in occupations with some exposure to generative AI	One in four worldwide; 3.3% in the most exposed group, 4.7% of women and 2.4% of men
ILO and World Bank, March 27, 2026	Share of employment exposed, 135 countries	30-32% in high-income countries; 10-15% in low-income countries
Anthropic, March 5, 2026	Share of each occupation's tasks seen in use of its models	Computer programmers 75%; data entry keyers 67%; 30% of workers at zero

IMF Staff Discussion Note 2024/001; ILO Working Paper 140; ILO-World Bank background paper for the *World Development Report 2026*, as reported by Staffing Industry Analysts; Anthropic (Maxim Massenkoff and Peter McCrory).

Rich countries are more exposed because more of their workers do office work at a screen: writing, analysis, and clerical tasks. In the IMF's reading, about half the exposed jobs in rich countries may gain from AI and half may lose. Women are more exposed than men because clerical work, the most exposed category, employs more women.

Exposure is lowest in work done with the hands: in a Microsoft study of 200,000 conversations with its Copilot assistant in 2024, home health aides and nursing assistants were among the least exposed occupations.

5b. How Firms Use AI

The best measurements of what firms do with AI come from surveys. The Federal Reserve Bank of New York asked businesses in New York and northern New Jersey about AI each August from 2024 to 2026 (September 1, 2026). In 2026, 61% of service firms used AI, against 40% in 2025 and 25% in 2024. Among manufacturers the share rose from 16% to 26% and then 51%. Inside the firms that used it, the median share of workers using it was 17% in services and 7% in manufacturing.

Few firms cut jobs because of it. In the six months before the 2026 survey, 4% of service firms had laid off workers because of AI, up from 1% a year earlier, and no manufacturer had. About 15% of service firms said AI had led them to hire fewer people, while about 13% said it had led them to hire more. Retraining was the commonest response: just over a third of service firms using AI retrained workers, and more than a fifth of manufacturers did.

The Beige Book, the Federal Reserve's report of what business contacts in its twelve districts say, found the same pattern on October 14, 2026. In five districts, contacts reported firms reducing staff through attrition, delaying hiring, or expecting to create fewer jobs after using AI to raise productivity. Technology staffing firms in the Minneapolis district said AI was not causing layoffs but was holding down new job creation. In both sources, AI changes hiring far more than firing.

5c. The Evidence on Jobs

The main studies use different data and methods, and the table sets them side by side.

Study and date	Data	Finding	Caveat
Stanford Digital Economy Lab: Brynjolfsson, Chandar, and Chen (August 12, 2026)	Payroll records of 3.5-5 million workers a month from ADP (Automatic Data Processing), January 2021-June 2026	Employment of 22-to-25-year-olds in the most exposed jobs 19% below its expected level, against 15% a year earlier; the gap comes from fewer hires, not more separations; average employment up about 6% since November 2022	Descriptive, not causal; smaller once education is controlled for; ADP figures run above national surveys
Anthropic: Massenkoff and McCrory (March 5, 2026)	Household survey	No systematic rise in unemployment among exposed workers since late 2022; the rate at which 22-to-25-year-olds found jobs in the most exposed occupations down about 14%	The hiring result is "just barely" significant; the company sells AI
Dallas Fed: Atkinson and Yamco (January 6, 2026)	Household survey	Job-finding by young entrants to the most exposed jobs down more than 3 points from its November 2023 peak, which the authors call atypical for a cycle	Could reflect education or another factor tied to exposure
Yale Budget Lab: Gimbel and coauthors (October 1, 2025; tracker updated September 15, 2026)	Household survey through August 2026	The mix of occupations changing only about 1 point faster than in the early internet era (2025); no link between AI use and employment or unemployment (2026)	Economy-wide measures cannot see a small group
Banque de France (October 8, 2026)	French hiring records through March 2026	Permanent hires of 21-to-29-year-olds 28% below November 2022 in the most exposed jobs, against 8% in the least exposed	Permanent contracts only; terminations fell too
Humlum and Vestergaard, Denmark (revised March 2026)	Danish government records	Effects on earnings or recorded hours larger than 2% ruled out two years after ChatGPT; a Norwegian study (2026) finds no relative decline either	Earlier data; different labor markets

Study pages and papers as dated; the Norwegian study is Hernæs and Kostøl, as cited by the Banque de France.

Three findings recur. There is no sign yet of AI reducing employment across the economy. There is a gap among the young: in jobs where AI can do much of the work, fewer people in their early twenties are being hired than the trends of other jobs predict. And the gap comes through hiring, not layoffs, so it falls on people who never get the job rather than on people who lose one.

In the Stanford data, employment of 22-to-25-year-olds in the two most exposed fifths of occupations fell about 11% from November 2022 to June 2026, while in the three least exposed fifths it grew about 10%. The decline is concentrated where AI is used to automate tasks, and in jobs built on written, codified knowledge, such as software development. Where AI mainly assists workers, employment is flat or rising. Base pay has not fallen, so the adjustment so far is in the number employed.

Critics objected that the Fed's rate rises of 2022-23 might have hit the same jobs, and the authors replied on February 9, 2026. The most exposed occupations turned out to be less sensitive to interest rates than others, and in the August update the gap kept widening after rates peaked. On timing, once each firm's overall hiring in each month is held constant, the relative decline appears only in 2024, and it had reached about 16% by October 2025.

The economy-wide studies do not contradict this. Workers aged 20 to 24 are about 9% of the labor force, the Dallas Fed's authors noted, so even if every job lost in their exposed occupations had become unemployment, the national rate would have risen about 0.1 point. A change that small cannot be seen in the measures the Yale Budget Lab tracks, which cover all workers.

5d. The Layoffs Blamed on AI

The most quoted AI job numbers are not measurements but the reasons employers give. Challenger, Gray & Christmas, an outplacement firm, counts the job cuts American employers announce and the reasons they cite. In 2025 employers attributed 54,836 of 1,206,374 announced cuts to AI. In January-September 2026, AI was the leading reason, cited for 120,136 of 573,195 announced cuts, 21%, and more than in the whole of 2025 (October 1, 2026). Total announced cuts were 39% lower than in the same months of 2025, so AI's share rose in a year of fewer layoffs.

The announcements are claims, often made to investors. Amazon cut 14,000 corporate jobs in October 2025 and 16,000 more on January 28, 2026, citing layers and bureaucracy, after its chief executive, Andy Jassy, said in June 2025 that generative AI would shrink its corporate workforce. Oracle's annual report, filed June 22, 2026, showed headcount down about 13% in a year, to about 141,000, and said adopting AI had resulted, and might continue to result, in workforce reductions. Salesforce's chief executive, Marc Benioff, said in September 2025 that AI agents had let it cut support staff from about 9,000 to about 5,000. Block's chief executive, Jack Dorsey, cited AI when it cut about 4,000 jobs, nearly half its staff, in February 2026.

Some firms reversed course or denied the link. Klarna, a Swedish payments company, said in 2024 that its AI assistant did the work of 700 customer-service agents. In May 2025 its chief executive, Sebastian Siemiatkowski, told Bloomberg that the AI-first approach had not been the right one, and Klarna began hiring human agents again. Microsoft said its 4,800 job cuts of July 2026 were not roles being replaced by AI.

Skeptics call some of these claims "AI-washing": presenting cuts made for other reasons as a sign of technological progress, which investors reward. Oxford Economics, a forecasting firm, calculated in January 2026 that AI accounted for only 4.5% of the cuts announced in January-November 2025. It suggested that some firms were recasting the correction of past over-hiring as an AI story. Martha Gimbel of the Yale

Budget Lab suggested that citing AI could spare firms from telling investors they had struggled with tariffs, immigration rules, and policy uncertainty (Fortune, February 2, 2026).

The one place where the law asks the question directly found nothing. Since March 2025, New York has asked employers filing notices under its Worker Adjustment and Retraining Notification (WARN) Act, the advance notices required before large layoffs, whether technological innovation or automation contributed. More than 160 companies filed in the first year, and not one checked the box (Hunton Andrews Kurth, a law firm, May 18, 2026).

5e. Productivity, and What Past Automation Did

If AI were already doing much of the work, output per hour would be rising faster. Labor productivity in the nonfarm business sector grew 2.1% in 2025 on revised figures (BLS, March 24, 2026), after 3.0% in 2024. In 2026 it grew at annual rates of 0.8% in the first quarter and 1.4% in the second, and 2.2% over the four quarters to June (BLS, September 3, 2026). Researchers at the Federal Reserve Bank of St. Louis read about 490,000 transcripts of company earnings calls. About 95% of executives' remarks on AI and productivity described gains expected in the future, a share steady since 2023, and the researchers found no measurable AI effect across the economy (July 2026). The Fed's chair, Kevin Warsh (Module 3), told Congress in July 2026 that AI had not displaced workers so far.

Inside firms the results depend on the task and the worker. Among 5,179 customer-support agents at one company, an AI assistant raised the number of problems resolved per hour by 14% on average and by 34% for the least experienced, with little gain for the most experienced (Brynjolfsson, Li, and Raymond, 2023). In a randomized trial by METR (Model Evaluation and Threat Research), a nonprofit that tests AI systems, 16 experienced software developers took 19% longer on tasks in their own projects when allowed to use AI, though they believed it had sped them up (July 10, 2025). A follow-up in February 2026 pointed to a speedup that METR itself judged unreliable. A Massachusetts Institute of Technology (MIT) study of companies' AI pilot projects reported in August 2025 that about 95% had little or no measurable effect on profits.

Past automation is the evidence both sides cite. Automated teller machines (ATMs) spread through American banking in the 1980s and 1990s. In urban markets the number of tellers per branch fell from 20 to 13 between 1988 and 2004, but cheaper branches let banks open 43% more of them, and teller jobs did not fall as the machines spread (James Bessen, 2015). New work also appears. David Autor and three coauthors found that most employment in 2018 was in job specialties introduced after 1940 (*Quarterly Journal of Economics*, 2024), from circuit layout designers to solar photovoltaic electricians. About six jobs in ten, in Autor's estimate, did not exist in 1940. The same study found that the loss of demand for labor from automation has grown over the past forty years, while the gain from technologies that assist workers has not.

5f. Is AI Already Taking Jobs? The Cases as Their Advocates Make Them

The case that AI is already taking jobs: its advocates argue that the effect is appearing where theory says it should appear first, in the hiring of new entrants into work AI can do. Firms are not firing people. They are not replacing those who leave and not hiring juniors, and an effect that works through hiring will not show in layoff counts or the unemployment rate for years. The same pattern turns up in payroll records, the household survey, and French hiring records. A Purdue University study of 9.37 million job postings found

that since mid-2023 about half the fall in the AI exposure of posted jobs came from employers posting fewer exposed jobs, with junior postings shifting most (May 2026). Researchers at the St. Louis Fed found that unemployment rose more from 2022 to 2025 in the occupations where workers use AI most (August 2025). The Stanford gap has widened in every release. Employers say so too, in the Challenger counts, in annual reports, and to the Fed's surveyors. And the models keep improving: on 220 tasks written by experienced professionals, the best models matched or beat the experts about half the time, in a test by OpenAI, a maker of the models (September 2025).

The case that AI has not yet taken jobs: its advocates argue that economy-wide data show stability and that weak hiring of the young has other causes. The Yale Budget Lab finds no AI footprint in the mix of occupations or in unemployment, and Stanford's own data show employment in the most exposed fifth of occupations up about 4%, counting workers of all ages. The difficulties of young graduates began in 2019, before ChatGPT (Module 6). The late-2022 starting point of the comparisons was the peak of a pandemic hiring boom in technology, as Matthew Mittelsteadt of the Cato Institute pointed out in August 2025, so part of the decline is that boom ending. Hiring in 2026 is weak across the economy for other reasons, among them higher interest rates, tariffs, federal job cuts, and the oil shock (Module 3). Firms that cite AI gain with investors, while New York's mandatory question drew no AI filings (section 5d). And in Denmark and Norway, researchers find no effect (section 5c).

What the evidence says: the studies agree on more than the debate suggests. In the United States and France, hiring of young people into jobs where AI can automate tasks has fallen relative to other jobs, and the fall works through fewer hires rather than layoffs. Across the economy nothing is visible yet, because the group affected is small (section 5c). The most direct link comes from France: among about 6,000 firms, the roughly 600 that used AI intensively hired fewer young people, though their total employment did not differ. What remains unproven is cause. Education, the end of the technology boom, and the general slowdown in hiring all overlap with exposure, and the gaps shrink when education is controlled for. OpenAI's test set one-off tasks, not whole jobs. The layoff counts are weaker evidence than they look, because they record the reasons employers choose to give.

The course's reading, stated once: AI is not yet taking jobs from people who have them, but it is beginning to reduce the hiring of young people into work it can automate. The effect is measurable in more than one country's data and still too small to move the national figures, and AI is its likely but unproven cause.

5g. The Forecasts and the Responses

The forecasts on record span a wide range. Dario Amodei, chief executive of Anthropic, said in an interview with the news site Axios, reported on May 28, 2025, that AI could eliminate about half of entry-level white-collar jobs and push unemployment to 10-20% within five years. About 17 months into that window, unemployment was 4.2% (Module 3). Jim Farley, Ford's chief executive, said in late June 2025 that AI would replace half of all white-collar workers in the United States. At the other end, Daron Acemoglu of MIT, who shared the 2024 Nobel prize in economics, estimated in 2024 that AI would raise total factor productivity, output per unit of labor and capital combined, by no more than 0.66% over ten years.

Lawmakers have acted mostly on how AI judges workers, not on whether it replaces them. Since January 1, 2026, Illinois has required employers to tell workers when AI is used in decisions on hiring, promotion, dismissal, and similar matters, and has barred AI that discriminates. Colorado's broader law was paused by a federal court in April 2026, after the AI company xAI and the Justice Department sued. Its narrower replacement, in force from January 1, 2027, requires notice when automated systems help decide matters

such as hiring, and human review after an adverse decision. An executive order of December 11, 2025 directed the Justice Department to challenge state AI laws.

For workers who do lose work, the evidence on retraining is modest. An Anthropic review of 56 randomized studies of American training programs found that offering a training place raised employment by 2 to 3 percentage points and earnings by about $1,000 a year, at a cost of about $13,000 per person (August 12, 2026). Cash support is being tried on a small scale: in late March 2026 a private pilot began paying $1,000 a month for a year to a few dozen workers whose jobs had been affected by AI.

Worked example — A Junior Analyst’s Week, Task by Task

Take a junior analyst at a consulting firm, paid $74,880 a year ($36 an hour) for a 40-hour week; every figure here is an illustrative assumption. With payroll taxes and benefits at the 1.27 ratio of Module 4’s worked example, an hour of the analyst costs the firm $45.72. The week divides into seven tasks. Gathering and cleaning data takes 10 hours, and AI tools now save about 3 of them. Drafting memos and summaries takes 8, and AI saves about 4. Reading and summarizing reports takes 6, and AI saves 3. Building charts and slides takes 5, and AI saves 1. Checking numbers and sources takes 3 hours, which AI does not shorten, and it adds 3 more, because every AI draft must be checked line by line. Meetings with clients (6 hours) and judgment calls and odd requests (2 hours) are untouched. So 29 of the 40 hours, 72.5%, are in exposed tasks, but the net saving is 11 hours less 3, or 8 hours: 20% of the week. That is worth $365.76 a week at the firm’s cost, against an AI subscription of about $150 a month, or $34.62 a week. For a team of five analysts the saving is 40 hours a week, one analyst’s whole week. The firm can keep all five and produce more, or leave the next vacancy unfilled. If it does the second, the team’s annual cost falls from $475,488 to $387,590, including $7,200 for four subscriptions, a saving of $87,898. No one is fired. The job that disappears is the one that would have been posted, and the tasks AI took over are the ones a junior learns on, while the checking it requires needs someone who already knows what a right answer looks like.

Module 5 Key Points

AI and Work

• Exposure measures tasks AI could do or speed up, not jobs lost: 40% of jobs worldwide and 60% in rich countries (IMF).

• In 2026, 61% of New York-area service firms used AI, but only 4% had laid off workers because of it.

• Stanford found employment of 22-to-25-year-olds in the most exposed jobs 19% below expected by June 2026, through fewer hires rather than layoffs.

• Employers cited AI for 120,136 of 573,195 announced cuts in January-September 2026, 21%, while total cuts fell 39%.

• Productivity grew 2.1% in 2025, and researchers find no measurable AI effect on productivity across the economy yet.

• AI is not yet taking jobs from people who have them, but it is beginning to reduce hiring of the young into automatable work.

Module 5 Quiz

Check Your Understanding

1. What did Stanford's August 2026 update find for workers aged 22 to 25 in the most AI-exposed occupations?

A) Their employment was about 19% below its expected level, mainly because fewer of them were hired.
B) They were laid off at about twice the rate of older workers in the same jobs.
C) Their base pay fell about 19% while their employment held steady.
D) Their employment grew faster than that of older workers.

2. What did the New York Fed's 2026 survey of businesses find about AI and jobs?

A) Most service firms that used AI had cut staff because of it.
B) Few firms used AI, so its effects on jobs could not be measured.
C) AI was used by 61% of service firms and had already cost about a quarter of their workers their jobs, mostly in back offices.
D) Use spread to 61% of service firms, but only 4% laid off workers because of it.

3. How many of the 573,195 job cuts announced in January-September 2026 did employers attribute to AI, according to Challenger, Gray & Christmas?

A) 54,836, about the same number as in all of 2025
B) About 4.5%, the share found for 2025
C) 120,136, about 21%
D) 293,753, more than any other reason that year

4. What does a measure of AI 'exposure', such as the IMF's 40% of jobs worldwide, describe?

A) The share of jobs that AI will eliminate within ten years, on the IMF's forecast
B) Jobs with tasks AI could do or speed up
C) Workers who use AI
D) The share of workers whose employers have retrained them to work alongside AI

5. What is the course's reading on whether AI is already taking jobs?

A) Not from people who have jobs, but it is beginning to reduce the hiring of young people into work AI can automate
B) Yes: AI caused most of 2026's announced job cuts
C) No; weak hiring is entirely due to interest rates
D) Yes, and it already shows clearly in the national unemployment rate

Module 6 — The First Job

Graduates, the Young, and the Trades

Recommended Reading / Reference

Book: Matthew B. Crawford, *Shop Class as Soulcraft: An Inquiry into the Value of Work* (2009), a philosopher turned motorcycle mechanic on what skilled manual work demands of the mind, and why schools steered students away from it

Reference: The Federal Reserve Bank of New York's *The Labor Market for Recent College Graduates* (updated quarterly) and the BLS table of earnings and unemployment by educational attainment (annual)

6a. The Young Worker's Market

A market that hires little is hardest on the people trying to get in. Workers who already have jobs are protected by low layoffs (Module 3). New entrants, the young above all, depend on employers posting new jobs, and in 2026 employers posted fewer.

The unemployment rate for workers aged 20 to 24 was 8.0% in September 2026, up from 7.1% in each month from June to August and down from 9.2% in September 2025. For teenagers aged 16 to 19 it was 14.5%, against 13.3% a year earlier. Workers aged 25 to 54 were at 3.6% (BLS, October 2, 2026). Young workers are always unemployed more often than others, because they move between school, jobs, and searches more often, and because they have the least experience to offer. The spread between them and workers aged 25 to 54, the prime working ages, is the measure of how hard entry is. In September 2026 a worker aged 20 to 24 was more than twice as likely to be unemployed as a prime-age worker.

Monthly figures for the young swing widely, because the samples are small. The 20-to-24 rate in September 2026 was lower than a year earlier, which does not fit a story of steady decline for young people in general. In July 2026, 21.3 million people aged 16 to 24 had jobs, and their unemployment rate was 9.1%, against 10.8% a year earlier (BLS, August 20, 2026, not seasonally adjusted). The difficulty in 2026 is narrower and falls on particular groups: recent graduates of four-year colleges, and young people seeking the office jobs where hiring has slowed most (Module 5).

6b. Recent Graduates

The Federal Reserve Bank of New York tracks **recent graduates**, people aged 22 to 27 with a bachelor's degree or more who are not in school. Their unemployment rate was about 5.6% in the second quarter of 2026, and 42% of those employed were **underemployed**, working in jobs that do not usually require a degree. Workers aged 22 to 27 without a degree had an unemployment rate of 7.2% in March 2026. A degree still lowers a young worker's risk of unemployment, but recent graduates now fare worse than the workforce as a whole.

For most of the three decades after 1990, when the series begins, recent graduates were unemployed less often than workers as a whole. That reversed in 2019, before the pandemic and before generative AI. On a twelve-month average of the New York Fed's monthly series, recent graduates' rate first exceeded the all-worker rate in February 2019 and has stayed above it since. By early 2026 the gap had reached 1.4 points, the widest on record, in an analysis by the data scientist Randal Olson. The comparison is not like for like, because the all-worker rate covers everyone aged 16 to 65, experienced workers included.

The choice of major matters. Computer engineering graduates had an unemployment rate of nearly 8%, second only to anthropology, on the New York Fed's most recent figures by major, while criminal justice graduates had 3.6% (Inside Higher Ed, June 29, 2026). Those figures come from an annual survey with wide margins of error. Early-career graduates in engineering majors had the highest median pay, more than $80,000 in 2024.

Data from the job market point the same way. Handshake, a job site for college students and graduates, counted 15% fewer full-time postings for new graduates in 2025 than in 2024 (January 2, 2026). Applications per posting reached 23 for the Class of 2026, against 20.8 for the Class of 2025 and 11 for the Class of 2023. Employers' own plans were less gloomy: in the National Association of Colleges and Employers' (NACE) spring survey, employers planned to hire 5.6% more members of the Class of 2026 than of the class before (April 27, 2026), up from 1.6% in their fall 2025 projections. By spring, Handshake's entry-level postings were 2% below a year earlier and 12% below their level before the pandemic, and 62% of seniors called themselves pessimistic, against 46% two years earlier.

6c. Why the First Job Matters

A weak market at graduation costs more than a slow start, according to three decades of research. Lisa Kahn studied Americans who finished college around the recession of the early 1980s (2010). A rise of one point in the national unemployment rate at graduation cut starting wages by 6% to 7%, and the loss was smaller but still significant fifteen years later. Graduates of the worse years also held lower-level occupations.

Philip Oreopoulos, Till von Wachter, and Andrew Heisz followed male Canadian college graduates for ten years in linked university and employer records (2012). The unlucky graduates' earnings losses lasted about ten years: a typical recession, a rise of five points in unemployment, cut first-year earnings by about 9%, a loss that halved within five years and faded by ten. The least advantaged graduates fared worst: those with the lowest predicted earnings lost about 15% in their first year and were still about 7.5% behind after ten. Those with the highest predicted earnings were less than 2% behind within four years. Moves to better employers account for about half of graduates' recovery, and the least advantaged made fewer of them.

Hannes Schwandt and von Wachter used large American data sets to follow cohorts into middle age (2019 and 2020). Losses at entry were larger for high school graduates and dropouts than for college graduates. Losses faded within about ten years, but earnings losses re-emerged around age 40, at about 1% to 1.3% of income for each point of unemployment at entry, through about age 50. Cohorts that entered in a recession were also less likely to be married and had higher death rates in middle age.

The mechanism is the ladder. A first job sets the starting pay from which raises compound, the skills learned on the job, and the contacts that lead to the next one. A graduate who starts in a job below her training often stays below it. On their own measure, the Burning Glass Institute and the Strada Institute found in February 2024 that 52% of recent graduates were underemployed a year after graduating, and that 73% of those who started underemployed were still underemployed ten years later. When firms adjust by not hiring rather than by laying off, the scar falls on the cohort that arrives at the wrong time.

6d. The Trades

The alternative to college that has drawn most attention is the skilled trades: electricians, plumbers, pipefitters, mechanics, and the like, most of whom learn through **registered apprenticeships**. These are paid jobs combined with classroom training, usually four or five years long, registered with the Labor Department or a state agency, and ending in a recognized credential. Apprentices earn while they learn, typically a rising share of a qualified worker's wage, and they finish without the debt a degree can bring. The BLS projects employment of electricians to grow 9% from 2025 to 2035, with about 72,700 openings a year, most of them replacing workers who retire or leave the trade.

There were 714,000 active registered apprentices in August 2026, against 679,000 when an executive order of April 2025 set a goal of one million (Work Shift, August 27, 2026). The Labor Department now describes the goal as one million active apprentices by the end of the presidential term. New registrations fell in fiscal 2025, for the first time since the pandemic, and fell again as of June 2026. Only 46.5% of apprentices complete their programs, and an analysis by the nonprofit Jobs for the Future projects a shortfall of about 150,000 even by 2030.

Occupation	Median pay, May 2025	Against all occupations
Elevator and escalator installers	$109,910	+116%
Electrical power-line installers	$95,320	+87%
Plumbers, pipefitters, and steamfitters	$63,800	+25%
Electricians	$63,190	+24%
Heating, air-conditioning, and refrigeration mechanics	$61,010	+20%
Carpenters	$60,580	+19%
Automotive service technicians	$50,620	-1%
Construction laborers	$46,680	-8%
All occupations	$50,980	—

BLS, *Occupational Outlook Handbook*, median annual pay in May 2025; the percentages are this course's calculation.

The trades pay well against the typical job, but not uniformly: the licensed trades pay well above the median for all occupations, while laborers and auto technicians earn about the median or less. The pay depends on the license as well as the skill. Electricians and plumbers need years of supervised work and a state license, which limits how fast new workers can enter and supports their pay.

Students have moved toward these programs at the margin. In fall 2025, enrollment at community colleges rose 3.0%, the largest gain of any kind of college, on the National Student Clearinghouse's final count (January 15, 2026). Its preliminary count (November 11, 2025) had found mechanic and repair programs at two-year colleges up 10.4% and computer and information science down 5.8%. The movement is real but small next to the numbers still choosing four-year degrees.

6e. College's Payoff

The average return to a degree remains large. Full-time workers aged 25 and over with a bachelor's degree and no further degree earned a median $1,578 a week in 2025, against $966 for high school graduates with no college, 63% more (BLS). They were also unemployed less, 2.8% against 4.3%. Workers with some college but no degree earned $1,062, only 10% more than high school graduates, so most of the payoff comes from finishing. Counting those with advanced degrees as well, full-time workers aged 25 and over

with at least a bachelor's earned $1,768 a week in the second quarter of 2026, against $994 for high school graduates, 78% more (BLS, July 21, 2026).

Finishing is not assured. Of students who started college in fall 2019, 61.1% had earned a degree or certificate within six years. Another 9.0% were still enrolled, and 29.8% had left without one (National Student Clearinghouse, December 4, 2025). Those who leave carry the cost of the years they attended without the higher pay that follows a degree. Completion is the weak point of the system, and it is weakest among students who are older, who study part time, or who come from low-income neighborhoods, the students for whom an alternative path matters most.

The cost is lower than the published prices suggest. Average published tuition and fees at a public four-year college were $11,950 for in-state students in 2025-26, and $45,000 at a private nonprofit college. After grants, the average in-state student at a public four-year college paid about $2,300 in tuition and fees, though living costs come on top (College Board, November 6, 2025). Of bachelor's graduates in 2023-24, 47% left with debt, an average of $29,560 among those who borrowed.

6f. Does College Still Pay? The Cases as Their Advocates Make Them

The case that college still pays: its advocates point to the earnings premium (section 6e) and the lower unemployment of graduates at every age. Over a working life the gap compounds into hundreds of thousands of dollars, far more than tuition costs most students after grants. Graduates' jobs also come with health and retirement benefits more often. A degree is a hedge against change: the graduate who loses one job is more likely to find another. Recent graduates' unemployment is above the all-worker rate mainly because new entrants of any kind are unemployed more often, and it remains below the rate for young people without degrees (section 6b).

The case that it pays less, and for fewer: its advocates say the average hides the margin. Many who start do not finish (section 6e), and they pay much of the cost without the payoff. Of those who finish, a large share work in jobs that do not need a degree, and most who start that way stay there (section 6c). The premium also reflects who goes to college: students who enroll differ in family background and preparation, so part of the premium would have come to them anyway. The safest majors of the last decade, in computing, now have some of the highest unemployment, and the jobs for new graduates that AI can do are where hiring has fallen most (Module 5). Meanwhile the licensed trades pay above the median job without tuition, and apprentices are paid while they train (section 6d).

What the evidence says: the premium is not only selection. Studies that compare similar students find large gains from attending, though smaller than the raw gap. Seth Zimmerman compared Florida students whose high school grades fell just above or just below a four-year university's cutoff for admission, students alike except for the chance to enroll (2014). For the students the cutoff affected, admission raised earnings 8 to 14 years after high school by about 22%, or about 11% for each year enrolled at a state university. But the return varies widely by major, by institution, and above all by completion. For the student unlikely to finish, or bound for a low-paying major, the expected return can be smaller than that of a well-paid trade. And recent graduates' position against the whole workforce is the weakest since the series began in 1990 (section 6b), a sign that the first rung of the graduate ladder is harder to reach.

The course's reading, stated once: college still pays for the typical student who finishes, by a wide margin and over a working life. It pays far less, and sometimes less than a trade, for the large minority who do not finish or who take majors with weak markets. The change since 2019 is not that the degree lost its value but that the entry point has narrowed.

Worked example — A Degree Against an Apprenticeship, Over a Working Life

Compare three 18-year-olds who work until 65; every input is an illustrative assumption built on this module's figures. The first goes to a public four-year college, paying the published in-state tuition of $11,950 a year while earning an assumed $8,000 a year at part-time jobs, a net cost of $3,950 a year. From 22 she earns the 2025 median for bachelor's holders, $1,578 a week or $82,056 a year, for 43 years. The second starts a four-year electrician's apprenticeship at 18, paid an assumed 60% of the median electrician's pay, $37,914 a year, and from 22 earns the full $63,190 for 43 years. The third earns the high school graduate's $966 a week, $50,232 a year, from 18 to 65. Summed without adjusting for when the pay arrives, the graduate earns $3.51 million, the electrician $2.87 million, and the high school graduate $2.36 million. At 22 the electrician is $167,456 ahead, four years of apprentice pay plus the $15,800 the graduate spent, and the graduate's $18,866-a-year advantage closes that gap at 31. Discounting future pay at 3% a year shrinks her lifetime lead over the electrician from $643,782 to $253,768 and moves her break-even to 34. Now add the risk of not finishing. If she has the national 61.1% chance of completing, and earns the some-college wage of $55,224 after leaving at 20, her expected lifetime pay is $3.11 million, still $241,000 more than a sure electrician's. Against a sure apprenticeship, the degree comes out ahead only if her chance of finishing is above 38%. But apprentices drop out too. If he has the national 46.5% chance of completing, and earns a high school wage after leaving at 20, the break-even chance for the degree falls to about 10%. The comparison turns less on the degree against the trade than on the odds of finishing each.

Module 6 Key Points

The First Job

• Unemployment for ages 20 to 24 was 8.0% in September 2026, lower than the 9.2% of a year earlier.

• Recent graduates were 5.6% unemployed and 42% underemployed in the second quarter of 2026; their gap over all workers hit a record in early 2026.

• Graduating into a weak market cuts pay for a decade or more, and the least advantaged graduates recover least.

• Registered apprentices numbered 714,000 in August 2026, far short of the one-million goal set in April 2025.

• Bachelor’s holders earned 63% more a week than high school graduates in 2025, but only 61.1% of college starters finish in six years.

• College still pays for those who finish; for likely non-finishers, a well-paid trade can pay more.

Module 6 Quiz

Check Your Understanding

1. What was the unemployment rate of recent college graduates aged 22 to 27 in the second quarter of 2026, according to the New York Fed?

A) About 2.8%, the 2025 rate for bachelor's holders aged 25 and over
B) About 8.0%, the same as all workers aged 20 to 24
C) About 5.6%, with 42% underemployed
D) About 7.2% overall

2. Since when has recent graduates' unemployment rate exceeded the rate for all workers, on a twelve-month average?

A) March 2020
B) February 2019, before the pandemic began
C) November 2022, when ChatGPT was first released
D) 2008, when the financial crisis began

3. What did Oreopoulos, von Wachter, and Heisz find about Canadian graduates who entered the labor market in a recession?

A) They earned more than other graduates by their thirties, because the recession had pushed them into graduate school.
B) Their earnings losses were large for top graduates and small for the least advantaged.
C) Their first jobs paid less, but the gap closed within a year as they changed employers.
D) Losses lasted about ten years.

4. How many active registered apprentices were there in August 2026?

A) 1 million
B) 679,000
C) About 714,000
D) Nearly 1.5 million

5. What is the course's reading on whether college still pays?

A) It pays for typical finishers.
B) It no longer pays for most students because recent graduates' unemployment has risen above the rate for all workers.
C) It pays only for computing and engineering majors, whose median earnings are the highest of any field.
D) It pays exactly as much as an apprenticeship once tuition and the years of study are counted.

Module 7 — Who Comes to Work

Immigration, Age, and the Supply of Workers

Recommended Reading / Reference

Book: George J. Borjas, *We Wanted Workers* (2016), the case that immigration's costs fall on the least-skilled workers, made by the economist at the center of the debate

Reference: BLS, *Foreign-Born Workers: Labor Force Characteristics, 2025* (May 19, 2026); CBO, *The Demographic Outlook: 2026 to 2056* (January 7, 2026)

7a. Labor Supply: People Times Participation

An economy's supply of workers is the product of two numbers: how many adults there are, and what share of them work or look for work. That share is the labor force participation rate. It stood at 61.8% in September 2026, against 62.5% a year earlier, 63.3% in February 2020, and a peak of 67.3% in early 2000. The low point of 2026 through September was 61.4%, in July.

Small changes in the rate move millions of people. The household survey covered about 275.6 million civilians aged 16 and over in September 2026, leaving out the armed forces and people in prisons and nursing homes, so each point of participation equals about 2.8 million workers. Had the rate stayed at its February 2020 level, the labor force would hold about 4.1 million more people.

Two forces pull the rate down. The first is age. The oldest baby boomers, the generation born from 1946 to 1964, turned 65 in 2011, and since then a rising share of adults has passed the usual age of retirement, which lowers the rate even if no one changes behavior. The second is measurement: new Census population estimates, applied to the household survey in early 2026, cut the measured labor force and lowered the rate (Module 2).

The rest of this module asks who is missing from work and why. The answer matters because a labor force that grows more slowly needs fewer new jobs to keep unemployment steady, which is why the small monthly job gains of 2026 have held the unemployment rate roughly level (Module 3). The missing workers have gone into retirement, into caregiving, out of the country, or out of the survey's count.

7b. Who Is Missing: Age, Care, and Disability

Participation among Americans aged 55 and over was 36.9% in September 2026, against 40.3% in February 2020. Part of the fall is arithmetic. The baby boom generation now spans ages 61 to 80, so a growing share of the 55-and-over group is in its seventies, an age at which most people have stopped working. The rate was 42.2% for men in the group and 32.4% for women, both lower than a year earlier.

Women aged 25 to 54, the prime working years, set a participation record of 78.5% in March 2026, above the 78.4% first reached in the summer of 2024. The rate slipped to 77.6% in June and stood at 78.0% in September, a stall below the record rather than a retreat from it.

Mothers' participation barely moved in 2025. The rate of mothers with children under 18 was 73.9% in 2025, against 74.0% in 2023 and 2024, which BLS describes as little changed, and for mothers whose youngest child was under 6 it was 68.0%. Fathers participated at 93.7%. The cost of child care is part of the calculation. Its national average price was $13,184 in 2025, by Child Care Aware of America's count, about

15% of the median household's income in 2025, and the number of child care centers fell about 1% during the year.

Prime-age men participated at 89.5% in September 2026. In the 1950s and 1960s their rate was about 97%, with a peak of 97.9% in 1954, and it has drifted down since the 1960s, falling faster in recessions. Disability is the largest single reason prime-age men give for being out of the labor force, according to a July 2025 analysis by the Brookings Institution's Hamilton Project.

People with disabilities work far less often than others. In 2025, 22.8% of them were employed, against 65.2% of people without a disability, and their unemployment rate was 8.3%, against 4.1%. About three-quarters were outside the labor force altogether, partly because disability is far more common at older ages.

7c. The Foreign-Born Workforce

One worker in five was born abroad. The foreign-born labor force averaged 32.7 million in 2025, 19.1% of the total, by BLS's annual count. The group includes naturalized citizens, permanent residents, refugees, people on temporary visas, and the unauthorized, and the household survey cannot tell them apart. Foreign-born adults participated at 66.3%, against 61.6% for the native-born. Foreign-born men participated at 76.9%, against 65.8% for native-born men, while foreign-born women participated slightly less than native-born women, at 56.2% against 57.5%.

The median foreign-born full-time worker earned $1,059 a week in 2025, 85.7% of the native-born median of $1,236. The difference reflects where immigrants work. They are overrepresented in farm, construction, factory, and service jobs and underrepresented in managerial and professional ones, as the table shows. Each share is measured differently, so the measure is given with it.

Workers	Share born abroad	Measure and source
All employed workers, for comparison	19.2%	BLS household survey, 2025 average of 11 months
Meatpacking (animal slaughtering and processing)	46%	Economic Policy Institute analysis of household-survey records, 2024
Farming, fishing, and forestry occupations	About 45%	BLS, 2025; a small sample
Hired crop farmworkers	More than two-thirds, including 61% born in Mexico	Labor Department's National Agricultural Workers Survey, interviews of 2020-22; 58% were authorized to work
Construction and extraction occupations	33%	BLS, 2025
Service occupations	24%	BLS, 2025
Transportation and material moving occupations	24%	BLS, 2025
Production occupations	23%	BLS, 2025
Management and professional occupations	16%	BLS, 2025

BLS shares computed from *Foreign-Born Workers: Labor Force Characteristics, 2025* (May 19, 2026), Table 4; an occupation counts workers by what they do, not by the industry that employs them. Economic Policy Institute chart of household-survey data, 1994-2024. National Agricultural Workers Survey, Research Report 17 (September 2023).

The monthly figures are less reliable than the annual ones. In September 2026 the household survey put the foreign-born labor force at 32.3 million, 19.0% of the total, with an unemployment rate of 3.2%, below the native-born rate. But the survey's weights match Census estimates of the population by age, sex, race, and

ethnicity, not by place of birth, so the foreign-born count is whatever the weighted sample yields. It was 33.4 million in March 2026 and 31.5 million in July, and BLS does not adjust the series for seasonal swings.

The weighting produced a paradox. The published September table showed the foreign-born labor force about 206,000 larger than a year earlier and the native-born labor force about 1.1 million smaller, the reverse of what the enforcement campaign would suggest. The two months straddle the new population controls of early 2026 (Module 2), and a team from the Brookings Institution and the American Enterprise Institute warned in January 2026 that the survey should not be used to measure population levels.

7d. Net Migration and Enforcement

Net migration, arrivals minus departures, added about 2.7 million people to the American population in the year to July 2024, by the Census Bureau's estimate. Every estimate since has been far lower, but no agency counts departures directly, and the main estimates for 2026 differ by more than a million people.

Estimate	2025	2026	Released
CBO (calendar years)	+410,000	+570,000	January 7, 2026
Census Bureau (years to July)	1.3 million (year to July 2025)	About 321,000 if trends continue	January 27, 2026
Brookings Institution and American Enterprise Institute team (calendar years)	-295,000 to -10,000	-925,000 to +185,000	January 13, 2026
Dallas Fed (unauthorized migration only)	-548,000	Early signs of stabilization	March 31, 2026

CBO, *The Demographic Outlook: 2026 to 2056*; Census Bureau, Vintage 2025 estimates; Wendy Edelberg, Stan Veuger, and Tara Watson, January 2026 update; Federal Reserve Bank of Dallas.

The estimates differ in method more than in data. More than half of the Census Bureau's year to July 2025 came before the change of administration in January 2025, and its 2026 figure assumes that recent trends continue. The Brookings and American Enterprise Institute team builds its range from visas, refugee admissions, border entries, removals, and an estimate of people leaving on their own, and it judged 2025 likely the first year of negative net migration in at least half a century.

Enforcement rose as entries fell. Immigration and Customs Enforcement (ICE), part of the Department of Homeland Security and led by Acting Director David Venturella since June 1, 2026, carried out 442,637 removals and returns in fiscal 2025, which ended in September 2025. That was about 171,000 more than a year earlier, and about 38% of those removed had criminal convictions or pending charges, by an ICE report released with the department's budget request in April 2026. ICE's posted statistics, a narrower count that showed 319,980 removals in fiscal 2025 through September 20, counted 356,389 in fiscal 2026 through July 11.

Detention reached 70,766 people on January 24, 2026, the most since the Transactional Records Access Clearinghouse at Syracuse University began its count in 2019, and 74.2% of them had no criminal conviction. The targets widened as the numbers grew, according to research by Chloe East and Elizabeth Cox, economists at the University of Colorado, with Caitlin Patler. The share of ICE arrestees with criminal convictions fell from about 60% in January 2025 to under 30% by the end of the year, and the share arrested in public places such as streets, workplaces, and courthouses rose from 19% to nearly 50%.

Worksite raids carried the campaign into particular industries. Agents raided the Glenn Valley Foods meatpacking plant in Omaha, Nebraska, on June 10, 2025 (the worked example below). On July 10, 2025, more than 360 workers were detained at farms in Carpinteria and Camarillo, California. On September 4, 2025, agents detained 475 people at the Hyundai-LG Energy Solution battery plant under construction in

Ellabell, Georgia, more than 300 of them South Korean nationals. South Korea negotiated their release, and a charter flight carried them home from September 11. Hyundai's chief executive, José Muñoz, said the plant would open at least two to three months late.

7e. The Visas

The H-1B visa admits workers with at least a bachelor's degree for specialty jobs, many of them in computing, under an annual cap of 85,000 new visas from which universities and research institutes are exempt. On September 19, 2025, Proclamation 10973 required employers to pay $100,000 with each new petition for a worker outside the country. They paid it on only about 700 petitions in its first year, by the government's own count.

The courts have stopped the payment. A federal court in Massachusetts held it unlawful on June 8, 2026, and after the fee was briefly restored during the appeal, the First Circuit Court of Appeals reinstated that ruling on July 24. On September 30, 2026, Judge Haywood Gilliam Jr. of the Northern District of California struck down the policies behind the payment, including a September 18 extension to 2027, because they were arbitrary and were issued without public comment. As of October 2026 the payment is not collected, and the government's appeal of the Massachusetts ruling is pending; an appeal of the California ruling was expected.

Two other changes aim at the same visa. The lottery for fiscal 2027 visas was the first to weight each registration by the wage offered, under a rule of December 29, 2025, giving better odds to higher-paid jobs. On August 25, 2026 the Department of Homeland Security proposed a separate fee of $103,265 on each new petition under the cap, set to recover $8.78 billion of six agencies' costs, which could apply from April 1, 2027 if made final.

The H-2A visa admits seasonal farmworkers with no annual cap, and its use is rising fast. The Labor Department certified 398,258 positions in fiscal 2025 and 254,688 in the first half of fiscal 2026, 16.9% more than a year earlier, a pace the American Farm Bureau Federation projects at a record of about 435,000 for the year. Farms must first offer the jobs to Americans, and in fiscal 2025 domestic applicants filled 182 of nearly 415,000 advertised positions.

The program's wage floor is in court. H-2A employers must pay at least the adverse effect wage rate, a minimum meant to keep guest workers from lowering local pay. A Labor Department rule of October 2, 2025 rebased the rate on two skill levels and let farms deduct part of the cost of the housing they must provide. A federal court in California held the challenged parts unlawful on August 26, 2026 and on October 2 ordered a new rule by December 30, 2026, and the department has told employers that back wages may be owed.

The H-2B visa does the same for seasonal work off the farm, in landscaping, hotels, seafood processing, and similar jobs, under a cap of 66,000 a year. For fiscal 2026 the government added up to 64,716 visas, 71% of them reserved for returning workers who had held the visa in recent years.

7f. What Immigration Does to Native-Born Workers: The Cases as Their Advocates Make Them

The case that immigration lowers some native-born workers' pay: George Borjas of Harvard, and the economists and groups who favor lower immigration, argue from supply and demand. More workers with a given skill lower the price of that skill, and the losses fall on the natives and earlier immigrants who compete most directly, above all workers without a high school diploma. Borjas's 2017 reexamination of the 1980

Mariel boatlift from Cuba found large wage losses in Miami for non-Hispanic men aged 25 to 59 without a diploma. The Center for Immigration Studies (CIS), which favors less immigration, reads the household survey, compared within each year so that the 2026 reweighting does not distort the change, as showing that natives gained about 2 million jobs in 2025 and 1.9 million in the first half of 2026 as immigrant employment fell.

The case that immigration does native-born workers little harm: David Card, Giovanni Peri, and the economists who share their view argue that immigrants add to demand as well as supply, fill jobs that complement natives' work, and push natives toward better-paid tasks. Card's 1990 study of the boatlift, which raised Miami's labor force by 7%, found virtually no effect on the wages of less-skilled workers other than Cubans and no rise in unemployment among less-skilled Black workers. Peri finds that natives move into jobs that use English and communication, which protects their pay. Michael Clemens and Jennifer Hunt showed in 2017 that the small sample behind Borjas's result changed its racial makeup sharply in 1980, which could account for the measured fall by itself.

What the evidence says: The National Academies of Sciences, Engineering, and Medicine reviewed the research in 2016 and found that over ten years or more the effect of immigration on native-born wages overall is very small, with negative effects concentrated on earlier immigrants and on natives without a high school diploma. The enforcement of 2025-26 tests the question in reverse. A Brookings study of May 29, 2026 compared 86 metro areas with surges in ICE arrests in the first half of 2025 against 255 others, and found employment in the surge areas 0.73% below its expected path, and 1.48% below after six months.

That shortfall comes to about 668,000 jobs, of which 51,000 to 297,000 would have been held by US-born workers, and construction in those areas lost about 2.2%, some 102,000 jobs. East and Cox found, in a National Bureau of Economic Research paper using data through November 2025, that where arrests spiked, employment of likely-unauthorized immigrants who were not detained fell 4% in farming, construction, manufacturing, and wholesale trade. US-born employment in those places also fell, and US-born wages did not rise. The CIS reading rests on household-survey levels that its authors concede carry a margin of error of about 690,000, before the weighting problems described above.

The course's reading, stated once: Over decades, immigration's effect on native-born wages is small on average and negative only for the groups that compete most directly, as the National Academies found. The enforcement of 2025-26 has not turned that small loss into a gain. Where arrests surged, employers cut output and hiring rather than raise pay to attract native-born workers, so the first measured effect of fewer immigrants has been fewer jobs, including jobs natives would have held. The cost has fallen on those removed, on those who stopped working out of fear, and on native-born workers who would have filled jobs that never appeared.

Worked example — One Meatpacking Plant in the Month After Its Raid

Glenn Valley Foods employed about 140 people at its Omaha plant, which makes frozen chopped meats, when agents detained about 75 of them. The company said it checked new hires through E-Verify, the federal online check of work eligibility. The next day about 30% of the staff came to work and output fell to about 20% of normal, by the account of its president, Chad Hartmann. The rest of the example is illustrative. Assume the plant sells $3 million of product a month, or $36 million a year, and pays $18 an hour. Week 1: output averages 30% of normal as frightened workers return. Week 2: all 65 remaining workers are back, and the plant hires 10 replacements, who work at half speed for their first two weeks, so its effective crew is 65 + 10 × 0.5 = 70, or 50% of normal. Week 3: 65 + 10 × 0.5 + 10 × 0.5 = 75, or 53.6%. Week 4: 65 + 10 + 10 × 0.5 + 10 × 0.5 = 85, or 60.7%. Output for the month averages (30 + 50 + 53.6 + 60.7) ÷ 4 = 48.6% of normal, so the plant loses about half a month's sales, roughly $1.54 million. At 10 hires a week it would not replace all 75 workers until week 9 or reach full speed until week 11. The detained workers' households lose 75 × $18 × 40 hours × 4 weeks = $216,000 of pay in the month. A raise of $2 an hour for all 140 jobs, to draw native-born applicants, would cost 140 × $2 × 2,080 hours = $582,400 a year, about 1.6% of sales. The studies above suggest that most employers in this position cut output and hiring rather than raise pay.

Module 7 Key Points

Who Comes to Work

• Participation was 61.8% in September 2026, against 63.3% in February 2020; each point equals about 2.8 million workers.

• Prime-age women set a participation record of 78.5% in March 2026; mothers' participation barely moved in 2025, with child care averaging $13,184.

• Immigrants were 19.1% of the labor force in 2025 and far more of meatpacking, farm, and construction work.

• Estimates of 2026 net migration run from -925,000 to +570,000; no agency counts departures directly.

• Where ICE arrests surged, employment fell about 668,000 jobs below its path, and US-born wages did not rise.

• The $100,000 H-1B payment was struck down twice in 2026 and is not collected; H-2A use is at a record pace.

Module 7 Quiz

Check Your Understanding

1. Why does the module say the household survey's monthly count of foreign-born workers should be read with caution?

A) The survey stopped asking about place of birth after the October 2025 shutdown.

B) Place of birth is not one of the survey's weighting controls, so the count is whatever the weighted sample yields and swings widely from month to month.

C) It counts only legal immigrants and leaves out the unauthorized.

D) BLS replaced it with State Department visa records in 2026.

2. What did the Brookings study of metro areas with surges in ICE arrests find?

A) Construction employment rose as US-born workers took the jobs immigrants had left.

B) Employment in every industry stayed on its expected path, so the arrests had no measurable effect.

C) US-born wages rose about 4%.

D) Employment fell below trend, including jobs natives would have held.

3. How did the labor force participation rate of September 2026 compare with February 2020?

A) 61.8%, against 63.3%

B) About the same

C) 67.3%, a new record high

D) Higher, at 63.3% against 61.8%, as older workers stayed in their jobs longer than before the pandemic

4. What was the status of the $100,000 H-1B payment in October 2026?

A) Collected on every new petition, raising billions of dollars a year for border enforcement under the 2025 tax law

B) Written into law by Congress in July 2025

C) Struck down; not collected

D) Replaced by a $103,265 fee now in force

5. Which group set a participation record in March 2026?

A) Teenagers

B) Women aged 25 to 54

C) Older workers

D) Fathers

Module 8 — Unions and Strikes

Bargaining, the Strike, and the State's Hand

Recommended Reading / Reference

Book: Richard B. Freeman and James L. Medoff, *What Do Unions Do?* (1984), the classic economic account of unions as both a monopoly on labor and a voice for workers, and still the frame for the debate

Reference: BLS, *Union Members — 2025* (February 18, 2026) and *Major Work Stoppages in 2025* (February 20, 2026); Gallup's annual poll on labor unions (fielded August 3-24, 2026)

8a. What a Union Does

A union is an organization of workers that bargains with an employer over pay, hours, and conditions for everyone in a defined group of jobs, called the bargaining unit. In the private sector the rules come from the National Labor Relations Act of 1935, often called the Wagner Act, which gave most private employees the right to organize, to bargain collectively, and to strike. The act, as amended in 1947, does not cover farmworkers, domestic workers, supervisors, or independent contractors, and public employees bargain under separate federal and state laws.

The National Labor Relations Board, created by the same act, runs union elections and judges charges of unfair labor practices, the acts the law forbids to employers or unions. When at least 30% of the workers in a proposed unit sign cards or a petition, the Board holds a secret-ballot vote, and a majority of the votes cast makes the union the unit's exclusive representative. An employer may instead recognize a union voluntarily when a majority signs cards. Under the Board's 2023 Cemex decision, an employer that breaks the law during an organizing campaign can be ordered to bargain without a new election.

Certification brings a legal duty to bargain in good faith, but not a duty to agree. The contract that results usually runs three to five years and sets wages, benefits, seniority rules, and a grievance procedure that ends in arbitration, and most contracts allow discipline only for just cause, a reason the employer can show. Every worker in the unit is covered, member or not.

The first contract is the hardest to win. A new union has no contract to extend, and an employer that opposes it can bargain for years without agreeing. Workers at 706 Starbucks stores, about 15,000 people, have voted to join Starbucks Workers United since the first vote in Buffalo, New York, in 2021, and the two sides began bargaining in February 2024 but had not reached a first contract as of August 2026. The Faster Labor Contracts Act, which the House passed on June 9, 2026, would require bargaining to begin within 10 days of certification, mediation after 90 days, and binding arbitration if mediation fails.

The strike is the union's main source of pressure. Workers stop work to impose a cost on the employer larger than the cost of agreeing, and they give up their pay while they do it. The law lets an employer hire permanent replacements during a strike over wages, though not during a strike over unfair labor practices, which is one reason unions often call their strikes protests against an employer's illegal acts.

8b. The Long Decline

In 1983, the first year of comparable data, 20.1% of wage and salary workers belonged to a union, 17.7 million people. In 2025 the rate was 10.0%, or 14.7 million members, by a BLS release that the shutdown of late 2025 pushed back to February 18, 2026. Because the October 2025 household survey was never

collected (Module 2), the 2025 figures are averages of 11 months, and BLS warns that they are not strictly comparable with other years. Union figures come from a quarter of the survey's sample, so the state estimates in the table are the least precise.

Group	Share of workers who are union members, 2025	Detail
Private sector	5.9%	7.4 million members
Public sector	32.9%	7.3 million members, more than five times the private rate
Transportation and utilities	14.3%	The most unionized private industry
Construction	11.1%	Building trades strongest in the Northeast, Midwest, and California
Manufacturing	7.7%	Once the core of the labor movement
Leisure and hospitality	3.0%	Restaurants, hotels, and entertainment
Financial activities	1.5%	The least unionized industry
Hawaii; New York	24.8%; 21.3%	The two most unionized states
North Carolina; South Dakota	2.5%; 2.3%	The two least unionized states

BLS, *Union Members — 2025* (February 18, 2026), Tables 3 and 5; BLS, *The Economics Daily* (April 24, 2026). California has the most members, about 2.5 million.

Nearly as many members now work for government as for private employers, although government employs far fewer people. The decline is a private-sector story, and economists point to several causes while disagreeing about their weights. Employment shifted from unionized manufacturing toward services, and from the Northeast and Midwest toward the South and the Mountain West, where unions were always weaker. Foreign competition and deregulation squeezed unionized firms in steel, autos, trucking, and airlines. Employers resisted organizing more actively, and the law's remedy for illegally firing a union supporter is reinstatement with back pay, with no fines. Unionized firms also grew more slowly than their nonunion rivals, so union jobs shrank even where no union was voted out.

Right-to-work laws are the clearest policy difference among the states. The Taft-Hartley Act of 1947 let states ban contracts that require every worker a union represents to pay it dues or a fee, and 26 states do so. Because a union must represent every worker in its unit, opponents of the laws say they let workers take a contract's benefits without paying for it, and supporters say no one should have to pay a private organization to keep a job. In the public sector the Supreme Court's 2018 Janus decision ended required fees nationwide. Michigan, where the United Auto Workers was founded, repealed its 2012 right-to-work law, effective in February 2024, the first state to repeal such a law in nearly 60 years.

8c. Approval Without Members

Unions are popular even as membership shrinks. Gallup's poll of August 2026 found that 71% of Americans approve of labor unions, against 68% a year earlier. Gallup's record is 75%, set in 1953 and again in 1957, and its low was 48%, in August 2009. A record 47% said they wanted unions to have more influence than they do today, while 26% wanted the same and 23% less.

Approval divides by party, but a majority of each group approves: 89% of Democrats, 70% of independents, and 52% of Republicans. The distance between the 71% who approve and the 10% who belong has several explanations. Approval is a general opinion, not a decision to pay dues or to risk a job. Workers who would vote for a union often never get the chance, because organizing takes a majority of a workplace, a

campaign, and then a first contract that can take years. And much of the job growth is in industries and states where unions have never been strong.

8d. The Strikes of 2023-26

BLS counts major work stoppages, strikes or lockouts involving at least 1,000 workers for at least one full shift. Thirty began in 2025, against 31 in 2024, and they involved 306,800 workers, of whom 232,800 worked for state and local governments. Education and health services accounted for 196,500 of the strikers. The count peaked at 470 stoppages in 1952 and bottomed at 5 in 2009, and the average for 2006 to 2025 was 17.8 a year. Cornell University's Labor Action Tracker, which counts strikes of any size, recorded 303 stoppages in 2025.

Dispute	Scale	Dates	Outcome
Autoworkers at Ford, General Motors, and Stellantis (United Auto Workers)	Three plants at first, more added in stages	From September 15, 2023, about six weeks	Raises of 25% over four and a half years; starting wage up 68%
Dockworkers (International Longshoremen's Association)	Every East and Gulf Coast port	October 1-3, 2024	Six-year contract ratified in February 2025: wages up 62%
Boeing machinists, Seattle area	About 33,000	September 13 to November 4, 2024	Raises of 38% over four years, approved by 59%
Boeing machinists, St. Louis area (defense work)	About 3,200	August 4 to November 13, 2025, when members ratified, about 101 days	Raises of 24% over the contract, by the Economic Policy Institute's count
Starbucks Workers United	More than 2,000 baristas at about 95 stores within a week	Began November 13, 2025	The union called a consumer boycott in August 2026
New York City nurses at the Mount Sinai, Montefiore, and NewYork-Presbyterian systems	Nearly 15,000	From January 12, 2026, about 41 days	Contracts ratified on February 11 and 21, 2026
Kaiser Permanente nurses and health professionals	31,000	January 26 to February 24, 2026	Raises of 21.5%; contracts run to September 29, 2029
Writers Guild of America	4,738 members voted	Ratified April 24, 2026, by 90.4%	Four years; minimum pay up 10.5%; $321 million for the health plan
Screen Actors Guild-American Federation of Television and Radio Artists (SAG-AFTRA)	Turnout of 19.25%	Ratified June 4, 2026, by 91.42%	Four years to June 30, 2030; minimum pay up 12.55%

BLS; the unions and companies; Becker's Hospital Review (September 24, 2026); EPI (February 20, 2026).

Three patterns run through the list. The largest raises came after the inflation of 2021-23 had cut real pay, and the autoworkers won back the cost-of-living clauses they had given up. Health care has become the center of private-sector striking, with 7 of the 13 private-sector major stoppages of 2025, by EPI's count. And technology entered bargaining: the dockworkers' contract bars fully automated terminals until 2030, and the Hollywood guilds wrote rules for AI. The autoworkers' contracts raised new hires' pay much faster than veterans', narrowing the gap that earlier contracts had opened when the union accepted lower pay for future hires.

The Hollywood contracts show how AI terms are being written. The writers' 2026 contract keeps the rules won in their strike of 2023: AI cannot write or rewrite literary material, its output does not count as source material, and a studio cannot require a writer to use it. It adds a duty to tell the guild when a studio licenses writers' work to train AI. The actors' contract allows a fully synthetic performer to replace a human only when

it adds significant value, bars digital replicas from crossing picket lines, and requires a business reason before a producer scans a performer. Both guilds settled without striking, unlike in 2023, when the writers struck for nearly five months and the actors for nearly four.

8e. The State's Hand

Labor law depends on who sits on the Board, and in 2025-26 the Board went from paralysis to a new majority. President Trump fired Member Gwynne Wilcox, a Democrat, on January 27, 2025, leaving the five-seat Board with two members, one short of the three it needs to decide cases. The Senate confirmed two Republicans, Scott Mayer and James Murphy, on December 18, 2025, and their swearing-in on January 7, 2026 restored the quorum after nearly a year. Crystal Carey became the agency's general counsel, who decides which cases to prosecute, the same day.

Murphy has been chairman since March 27, 2026. On August 7, 2026 the Senate confirmed James Macy, a Republican, and a second term for David Prouty, the Board's Democrat, giving Republicans a 3-1 majority with one seat vacant. By custom the Board overrules a precedent only with three votes in the majority, which the Republicans now have. On September 23, 2026, in Lion Elastomers, the Board decided 2-1, over Prouty's dissent, to treat as controlling a standard set during President Trump's first term for when workers lose the law's protection over misconduct during union or other protected activity. A federal appeals court had vacated the 2023 decision that replaced that standard, so no precedent had to be overruled. Law firms expect the majority to revisit Cemex and a 2024 decision that barred mandatory meetings at which employers argue against unions.

The Supreme Court had already removed the Board's shield against the president. In Trump v. Slaughter, decided 6-3 on June 29, 2026, it held that the rule letting members of the Federal Trade Commission be removed only for cause violates the separation of powers, and it overruled Humphrey's Executor, the 1935 decision that had upheld such protections for independent commissions. The Court left an exception for the Federal Reserve. In practice a president can now remove NLRB members at will, so the Board's direction can change as soon as the White House does. In August 2025 the Fifth Circuit Court of Appeals had already ruled, in a case brought by SpaceX, that the Board's structure was likely unconstitutional.

Two states tried to fill the gap while the Board lacked a quorum. A New York law of September 2025 let its state labor board take private-sector cases unless the NLRB went to court to claim them. In July 2026 a federal court, ruling in a suit brought by Amazon, declared the law unconstitutional and permanently barred its enforcement. A California law signed on September 30, 2025 let its board act when the NLRB lacks a quorum or delays a case, and a federal judge blocked those provisions on December 26, 2025 as preempted by federal law.

The largest change in bargaining rights came inside the federal government. An executive order of March 27, 2025 used a national-security exception in federal labor law to end collective bargaining at many agencies, covering about a million workers. Lower courts blocked it at first, but on February 26, 2026 the Ninth Circuit Court of Appeals vacated an injunction won by the largest federal employees' union, finding that the government would have issued the order on security grounds whatever its motive, and many agencies have since ended their contracts. The House voted 231-195 on December 11, 2025, with 20 Republicans in the majority, for a bill to void the order, which then went to the Senate. Even so, federal workers' union membership rose from 29.9% to 31.1% in 2025, by EPI's reading of BLS data.

8f. What Unions Do to Pay, Productivity, and Jobs: The Cases as Their Advocates Make Them

The case that unions raise pay and narrow inequality: Unions and the economists who see them favorably argue that bargaining together wins wages no single worker could. Union members' median pay was $1,404 a week in 2025, against $1,174 for nonunion workers, a raw gap of about 20%, and studies that compare similar workers usually find a smaller but lasting premium. Henry Farber, Daniel Herbst, Ilyana Kuziemko, and Suresh Naidu, using surveys back to the 1930s, found a premium for union households of roughly 10% to 20% that held steady across the century, and that unions reduced inequality. Freeman and Medoff argued that unions also give workers a voice, which lowers quitting and can raise productivity.

The case that unions' gains are smaller and cost jobs: Economists skeptical of unions argue that the raw gap mostly reflects who joins unions and where they work. John DiNardo and David Lee compared employers where unions barely won representation elections from 1984 to 2001 with employers where unions barely lost, and found wage effects close to zero and small effects on every outcome they measured, including whether the business survived. Barry Hirsch's research finds that unionized firms earn lower profits, invest less in equipment and research, and grow employment more slowly, so members' gains come partly out of future jobs. Work rules that limit automation protect jobs today at a cost to productivity.

What the evidence says: The two bodies of research measure different things. The close-election studies measure what a newly certified union wins, often at workplaces where a first contract comes slowly or never, and they find little. The long-run studies measure established unions and find a premium that has lasted a century, along with narrower pay gaps inside unionized workplaces. The contracts of 2023-26 won raises well above the pace of wage growth economy-wide (Module 4), but they followed an inflation that had cut real pay. Evidence on productivity is mixed, with gains where unions lower turnover and losses where work rules slow change. Slower employment growth at unionized firms is the most consistent cost.

The course's reading, stated once: Established unions raise their members' pay above what similar nonunion workers earn, and they narrow pay gaps where they bargain. Winning an election delivers far less, because the gains depend on a first contract the law does not compel, which is why the close-election studies find little and why the first contract matters more than the vote. The costs show up as slower investment and slower job growth at unionized firms, not as closures. With the Board's rules now changing with each administration, the reach of unions will depend more on the law's protection of a first contract than on public approval.

Worked example — A Strike's Arithmetic for Both Sides

Take a hospital whose 1,000 nurses earn $55 an hour and work three 12-hour shifts, 36 hours a week. All the figures are illustrative. The contract has expired, the hospital offers raises of 16.5% over four years, and the union demands 27%. After a four-week strike they settle at 22%, so the strike wins 5.5 extra points, assumed here to phase in evenly at 1.375 points a year, ignoring compounding. The nurse: her weekly pay is $55 × 36 = $1,980, or $102,960 a year. Four weeks out costs her 4 × $1,980 = $7,920, and the union's strike fund pays $400 a week, $1,600 in all, so her net loss is $6,320. The extra raise pays 1.375% × $102,960 = $1,415.70 in year 1, $2,831.40 in year 2, $4,247.10 in year 3, and $5,662.80 in year 4, or $14,157 over the contract. She has recovered $4,247 of her $6,320 by the end of year 2 and breaks even during year 3, and the higher base carries into every later contract. The hospital: it saves 1,000 × $7,920 = $7.92 million of wages, but it pays an agency for 600 replacement nurses at $120 an hour, 600 × 36 × 4 × $120 = $10.37 million, and loses about $6 million of revenue from diverted patients and postponed procedures. Its net cost is $10.37 + $6.00 − $7.92 = $8.45 million. The extra raise it resisted costs 1,000 × $14,157 = $14.16 million over four years and about $5.66 million a year after that. Had the hospital known the outcome, settling at 22% without a strike would have saved it $8.45 million, and the nurses' month without pay repaid itself in under three years. Strikes happen because neither side knows how long the other can hold out, and many end between the last offers.

Module 8 Key Points

Unions and Strikes

• Union membership fell from 20.1% of workers in 1983 to 10.0% in 2025; the private-sector rate is 5.9%.

• Gallup found 71% approval of unions in August 2026, and a record 47% wanted unions to have more influence.

• Thirty major stoppages began in 2025, involving 306,800 workers, 232,800 of them in state and local government.

• The NLRB lacked a quorum from January 27, 2025 to January 7, 2026; Republicans have held a 3-1 majority since August 7, 2026.

• Trump v. Slaughter (June 29, 2026) lets presidents remove NLRB members at will, so labor policy can swing with each administration.

• Members earn about 20% more than nonunion workers; studies of narrowly won elections find new unions raise pay little.

Module 8 Quiz

Check Your Understanding

1. What did the Supreme Court decide in Trump v. Slaughter on June 29, 2026?

A) It upheld the 1935 rule that members of independent commissions such as the NLRB can be removed only for cause, and it ordered the fired member reinstated.
B) It struck down the New York and California labor laws.
C) It ruled that the NLRB lacked a quorum in 2025.
D) It overruled Humphrey's Executor, so presidents can remove commissioners at will, with an exception for the Fed.

2. What did Gallup's August 2026 poll find about labor unions?

A) A record 75% approved, beating the highs of the 1950s
B) Approval fell to 48%, its lowest since 2009
C) 71% approved, and a record 47% wanted unions to have more influence than they do today
D) Republicans approved of unions more than Democrats did

3. Who were most of the workers in the major work stoppages that began in 2025?

A) Most were autoworkers and aircraft machinists in private manufacturing plants.
B) Most worked for state and local governments.
C) Most were Hollywood writers and actors, whose guilds struck when their contracts expired.
D) Most were dockworkers.

4. What share of wage and salary workers belonged to a union in 2025?

A) 5.9%, the lowest since records began in 1983
B) 32.9%, as in the public sector
C) 20.1%, unchanged since 1983
D) 10.0%

5. What did DiNardo and Lee's studies of close union elections find?

A) Little effect on wages or survival
B) Large wage gains
C) Higher productivity
D) Most new union employers closed within five years

Module 9 — The Rules of Work

Wages, Hours, Safety, and the Law

Recommended Reading / Reference

Book: David Card and Alan B. Krueger, *Myth and Measurement: The New Economics of the Minimum Wage* (1995), the New Jersey study and the evidence behind it, the book that reopened the minimum-wage debate

Reference: The Labor Department's Wage and Hour Division tables of state minimum wages (revised July 1, 2026); the Center on Budget and Policy Priorities' table of unemployment insurance weeks by state (September 28, 2026)

9a. Employment at Will, and Its Exceptions

Most American jobs are held at will: the employer may fire a worker for any reason or none, without notice, and the worker may quit on the same terms. American courts adopted the rule in the late 1800s. It is the default in every state but one, and it sets the United States apart from most rich countries, where a dismissal needs a reason and often notice and severance pay.

Montana is the exception. Its Wrongful Discharge from Employment Act of 1987 requires good cause, a legitimate business reason, to fire a worker who has finished a probationary period, 12 months unless the employer sets a different one. It caps a wrongly fired worker's lost wages and benefits at four years.

Everywhere else the exceptions come from statutes, contracts, and courts. Federal law bars firing a worker because of race, color, religion, sex, or national origin (the Civil Rights Act of 1964), age if 40 or over (1967), or disability (1990), and most states add categories of their own. The Equal Employment Opportunity Commission (EEOC) enforces the federal laws. A union contract's just-cause rule (Module 8) protects the workers it covers, as do some individual contracts, and most states protect workers fired for refusing to break the law or for serving on a jury.

The federal civil service was the large exception. Career employees have been hired on merit since the Pendleton Act of 1883, and since the Civil Service Reform Act of 1978 they could appeal a dismissal to the Merit Systems Protection Board. A rule from the Office of Personnel Management (OPM), the government's personnel agency, published February 6, 2026 and effective March 9, put into regulation Schedule Policy/Career, a category created by executive order in January 2025 for career positions judged to influence policy. Employees moved into it keep merit hiring and protection against discrimination, but they lose the right to appeal a dismissal, so they serve at will.

Only an executive order can move positions into the schedule. The order of June 3, 2026 (Executive Order 14410) moved about 8,000 employees in more than 4,800 positions at 54 agencies, against an earlier estimate of about 50,000, and the OPM director, Scott Kupor, said 97% were at the top grade of the general schedule, GS-15, or above. Unions and advocacy groups have sued, and courts had held the cases until positions were actually moved.

9b. The Minimum Wage

The Fair Labor Standards Act of 1938 set the first federal minimum wage, 25 cents an hour, along with a maximum workweek that reached 40 hours in 1940 and limits on child labor. The federal minimum has been $7.25 an hour since July 24, 2009, the longest stretch without an increase since the law was passed.

The states have moved on their own. The Labor Department's table, revised July 1, 2026, lists 30 states and the District of Columbia with minimums above $7.25. Washington's $17.13 is the highest state rate. California's is $16.90, and Oregon's is $15.55, or $16.80 in the Portland area, and some cities set higher rates still. On January 1, 2026, 68 jurisdictions, 19 states and 49 cities and counties, raised their minimums, by the count of the National Employment Law Project, an advocacy group for low-wage workers. Many states now raise their minimums with inflation each year. The other 20 states, mainly in the South, have no minimum of their own or one at or below the federal rate.

Voters do not always choose an increase. On June 16, 2026, Oklahoma voters rejected State Question 832, which would have raised the state's minimum to $12 in 2027 and $15 by 2029 and then tied it to inflation, with about 56% voting no.

Tipped workers have their own floor. Under federal law an employer may pay a tipped worker, one who receives more than $30 a month in tips, a cash wage of $2.13 an hour, a rate unchanged since 1991, so long as tips bring the total to at least $7.25. The difference, $5.12, is called the tip credit. Seven states, Alaska, California, Minnesota, Montana, Nevada, Oregon, and Washington, allow no tip credit and require the full state minimum in cash.

9c. Overtime, and the New Tax Deductions

The 1938 law also requires pay at one and a half times the regular rate for hours over 40 in a week, but salaried executives, administrators, and professionals are exempt if their duties qualify and they earn at least a set salary. That threshold is $684 a week, about $35,568 a year, set in 2019. A 2024 rule raised it to about $44,000 a year in July 2024 and was to raise it to about $59,000 in January 2025, but a federal court in Texas vacated the rule in November 2024, and the Labor Department removed its text on May 15, 2026. Highly paid employees, above $107,432 a year, face a looser duties test.

The tax law signed on July 4, 2025, the One Big Beautiful Bill Act, created two new income tax deductions for tax years 2025 through 2028. Workers in occupations the Treasury lists as customarily tipped may deduct up to $25,000 a year of reported tips. Workers paid overtime may deduct the premium the federal law requires, the half in time and a half, up to $12,500 a year, or $25,000 on a joint return, but not overtime required only by a state law or a union contract. Both deductions phase out above $150,000 of income, or $300,000 for joint filers, and neither reduces payroll taxes for Social Security and Medicare.

The deductions were first claimed in the filing season of 2026. Treasury Secretary Scott Bessent said that through March 27, 2026 more than 4.6 million taxpayers had claimed the tips deduction and nearly 20 million had benefited from the overtime deduction. Those are the secretary's statements, not statistics published by the Internal Revenue Service. Critics argue that the deductions treat workers with the same income differently and invite employers to relabel pay as tips or overtime. Many tipped workers earn too little to owe much income tax, as the worked example shows.

9d. Noncompetes, Safety, and the Labor Department

A noncompete agreement bars a worker from joining or starting a competing business for a period after leaving a job. The Federal Trade Commission (FTC) adopted a rule in 2024 that would have banned most of them nationwide, but a federal court in Texas set it aside on August 20, 2024, before it took effect. On September 5, 2025, under Chairman Andrew Ferguson, the FTC dropped its appeals and turned to case-by-case enforcement. A day earlier it had proposed an order against Gateway Services, a pet-cremation company that had required nearly all its employees to sign one-year nationwide noncompetes.

State law now decides most cases. California, Minnesota, North Dakota, and Oklahoma ban most employee noncompetes. Florida moved the other way with a law in force since July 1, 2025 that allows noncompetes of up to four years for workers earning more than twice their county's mean wage.

The Occupational Safety and Health Act of 1970 requires employers to keep workplaces free of recognized serious hazards and created the Occupational Safety and Health Administration (OSHA) to set and enforce standards. In 2024, 5,070 workers died from injuries on the job, a rate of 3.3 per 100,000 full-time workers, down from 5,283 in 2023, by BLS's census of fatal injuries released February 19, 2026. That is one death every 104 minutes, and transportation incidents caused 38.2% of them.

OSHA proposed its first standard on heat on August 30, 2024, requiring water, rest breaks, and shade when the heat index passes set levels. Hearings ran from June 16 to July 2, 2025, but as of October 2026 there is no final rule, and the Labor Department's 2026 agenda plans a revised proposal in December 2026. Meanwhile OSHA cites heat hazards under the law's general duty to keep workplaces safe, and seven states, among them California, Washington, and Oregon, have heat standards of their own.

The Labor Department enforces these laws through its Wage and Hour Division and OSHA. Keith Sonderling has been Labor Secretary since October 2, 2026. He was deputy secretary, became acting secretary when Lori Chavez-DeRemer left in late April 2026, and was confirmed 47-41 on September 30. On April 23, 2026 the department proposed a test of when two companies are joint employers, responsible together for the same workers' wages, that turns on actual control over hiring and firing, supervision and schedules, pay, and records. It has also pursued the goal of one million active apprentices (Module 6).

9e. Insurance Against Job Loss, and Paid Leave

Unemployment insurance, created by the Social Security Act of 1935, is run by the states under federal rules and paid for mainly by taxes on employers. It replaces part of a laid-off worker's wages for a limited time, but most unemployed people receive nothing. In 2025 just 26.5% of the unemployed received benefits, by the Federal Reserve Bank of Cleveland's count, and the share varied more than sixfold among the states.

State	Share of unemployed receiving benefits, 2025	Maximum weeks of benefits, 2026
Minnesota	52.7%, the highest	26
Pennsylvania	37.6%	26
Ohio	18.1%	26
Kentucky	10.6%	16
Florida	8.0%, the lowest	12

Kyle D. Fee, Federal Reserve Bank of Cleveland (July 1, 2026); Center on Budget and Policy Priorities (September 28, 2026).

Some of the unemployed are ineligible because they quit or were new to work, but the states' rules explain much of the spread. Most states pay for up to 26 weeks and Massachusetts for 30, while Florida, Louisiana, North Carolina, and Tennessee pay for as few as 12. Across states, the weeks available track the share receiving benefits, with a correlation of 0.61 in the Cleveland Fed's analysis. In 2022, 74% of unemployed people who had worked in the prior year did not apply, and 55% of those believed they were ineligible, by a BLS survey.

The United States has no national paid family or medical leave. The federal Family and Medical Leave Act of 1993 guarantees eligible workers up to 12 weeks of unpaid leave with their jobs protected, and the states have built paid programs funded mostly by small payroll contributions. Delaware's and Minnesota's programs began paying benefits on January 1, 2026, and Maine's on May 1, 2026. Virginia enacted a program on April 22, 2026, with contributions from April 1, 2028, benefits from December 1, 2028, and up to 12 weeks of leave. Maryland's contributions begin on January 1, 2027 and its benefits on January 3, 2028, after repeated delays.

9f. Does the Minimum Wage Cost Jobs? The Cases as Their Advocates Make Them

The case that a higher minimum costs jobs: Economists who expect job losses argue from the model of a competitive market. Raise the price of low-skilled labor above what it adds to output and employers will hire fewer workers, cut hours, automate, or raise prices and sell less. The workers who lose are the least skilled and least experienced, the people a minimum is meant to help. David Neumark and William Wascher reanalyzed the New Jersey study with payroll records in 2000 and found employment losses, and Neumark and Peter Shirley's 2022 review found that most American studies estimate negative effects for low-skilled workers.

The case that moderate increases cost few jobs: Economists who find small effects argue that many employers have some power to set wages, because workers cannot switch jobs without cost, and such employers pay less than a competitive market would (Module 4). A higher minimum can then raise pay with little loss of jobs, and it lowers turnover and its costs. David Card and Alan Krueger studied New Jersey's increase of April 1, 1992, from $4.25 to $5.05, in 410 fast-food restaurants. Employment rose about 13% relative to Pennsylvania, whose minimum stayed at $4.25.

What the evidence says: The best recent studies find small effects from the increases studied so far. Doruk Cengiz, Arindrajit Dube, Attila Lindner, and Ben Zipperer examined 138 state increases from 1979 to 2016 and found that the number of low-wage jobs was essentially unchanged five years later, as jobs lost below the new minimum were offset by jobs just above it. Seattle's rise to $13 in 2016 was larger. A University of Washington team found it cut hours in low-wage jobs by 6% to 7% and lowered their total payroll, while studies of Seattle's restaurants by Berkeley economists found little loss of jobs.

CBO's estimate of February 8, 2021 for raising the federal minimum to $15 by 2025 counted both effects: an average of 1.4 million fewer jobs, 0.9% of employment, and 0.9 million fewer people in poverty. In the lowest-wage states a $15 floor would sit much closer to the typical wage than the increases those studies examined.

The course's reading, stated once: The increases studied so far, mostly state minimums set well below the local median wage, raised pay with small effects on employment, as the 138-state study found. Larger increases relative to local wages carry larger risks, seen in Seattle's hours and in CBO's estimate. Those losses would fall on the least experienced workers in the lowest-wage places. Minimums tied to local wages

and adjusted each year fit the evidence better than one national figure, while the federal floor has lost value to inflation since 2009, as the worked example shows.

Worked example — The Federal Minimum's Buying Power, and a Server's Pay Under the Tips Deduction

Part 1, the minimum wage. The federal minimum rose to $1.60 on February 1, 1968. The consumer price index (1982-84 = 100, not seasonally adjusted) averaged 34.783 in 1968 and stood at 336.940 in September 2026, so prices are 336.940 ÷ 34.783 = 9.687 times their 1968 level. The 1968 minimum in September 2026 dollars is $1.60 × 9.687 = $15.50 an hour, and $15.50 × 2,080 hours = $32,240 for a full-time year, against 2,080 × $7.25 = $15,080 today. Today's minimum buys 7.25 ÷ 15.50 = 46.8% of what the 1968 minimum bought. Since July 2009, when the index stood at 215.351, prices have risen 336.940 ÷ 215.351 = 1.5646 times, up 56.5%. The $7.25 of 2009 would be $11.34 in September 2026, and $7.25 now buys what $4.63 bought then, a loss of 36.1%. Part 2, the tips deduction. Take a server in a state that allows the $2.13 cash wage, single with no children, working 35 hours a week for 50 weeks, 1,750 hours, in tax year 2026, with a standard deduction of $16,100, a 10% rate on the first $12,400 of taxable income, and 12% on the next $38,000. The hours and tips are illustrative. Her cash wage is 1,750 × $2.13 = $3,727.50. At $20 an hour in tips, $35,000 a year, her pay is $38,727.50. Taxable income is $38,727.50 − $16,100 = $22,627.50, and her tax is $1,240 + 12% × $10,227.50 = $2,467.30. The tips deduction is capped at $25,000, which reduces her taxable income to zero, so she saves $2,467.30, 6.4% of her pay. She still owes $2,962.65 of payroll tax (7.65%), which the deduction does not touch. At $12 an hour in tips, $21,000 a year, she would owe only $862.75 of income tax, so the deduction saves her $862.75, 3.5% of her pay. At $30 an hour in tips, $52,500, the cap binds and she saves $3,000. The deduction is worth more the higher a worker's tips and tax bracket, until it phases out above $150,000 of income, and least to the lowest-paid, who owe little income tax to begin with.

Module 9 Key Points

The Rules of Work

• The federal minimum has been $7.25 since July 24, 2009; 30 states and the District of Columbia set higher minimums.

• Adjusted for prices to September 2026, the 1968 minimum was worth $15.50 an hour; $7.25 buys 46.8% as much.

• Every state but Montana allows employment at will; a June 2026 order moved about 8,000 federal employees into an at-will schedule.

• The tips deduction (up to $25,000) and overtime deduction (up to $12,500) run for tax years 2025-28.

• Just 26.5% of unemployed people received unemployment insurance in 2025, from 52.7% in Minnesota to 8.0% in Florida.

• A study of 138 state increases found little job loss; CBO estimated a $15 federal minimum would cost 1.4 million jobs.

Module 9 Quiz

Check Your Understanding

1. What did the study of 138 state minimum-wage increases by Cengiz, Dube, Lindner, and Zipperer find?

A) The number of low-wage jobs was essentially unchanged five years later.
B) Low-wage employment fell about 1.4 million jobs nationwide.
C) Hours in low-wage jobs fell 6% to 7% after each increase, as employers cut shifts to cover the higher pay.
D) Employment rose 13% wherever the minimum went up.

2. How many states had a minimum wage above the federal $7.25 in 2026, by the Labor Department's table?

A) All 50 states, after 2026's increases
B) 19 states, the ones that raised their minimums on January 1
C) 30, plus the District of Columbia
D) Washington alone

3. What does the overtime deduction in the July 2025 tax law cover?

A) All overtime pay, including overtime required by state laws or union contracts
B) Overtime and tips together, up to $12,500 a year
C) Pay for hours over 40 in any job, with no income limit
D) Only the federally required premium, the half in time and a half, up to $12,500 a year or $25,000 joint

4. Which state requires good cause to fire most workers after a probationary period?

A) California, under its 2024 law
B) Montana
C) Florida, under its 2025 noncompete law
D) New York, under its state labor board law

5. What share of unemployed people received unemployment insurance benefits in 2025?

A) About 40%, or 2 million at a time
B) 52.7%, as in Minnesota
C) About three in four
D) 26.5%

Module 10 — Gigs and Contracts

Independent Work, Hours, and Where Work Happens

Recommended Reading / Reference

Book: Alex Rosenblat, *Uberland: How Algorithms Are Rewriting the Rules of Work* (2018), a researcher's study of Uber's drivers, and the clearest account of how an app manages a workforce it says it does not employ

Reference: Bureau of Labor Statistics, *Contingent and Alternative Employment Arrangements, July 2023* (released November 8, 2024), the official count of independent contractors and of on-call, temporary, and contingent workers

10a. Independent and Contingent Work

An employee works on the employer's payroll. The employer withholds income tax, pays half of the Social Security and Medicare tax, pays for unemployment insurance and workers' compensation for injuries, and owes most employees the minimum wage and overtime. An **independent contractor** is in business on his or her own account, paid by the job, and owed none of these. A **contingent worker** is one who does not expect the job to last, whatever the contract says, and some workers are both.

BLS counts these arrangements in an occasional supplement to the household survey, most recently in May 2017 and July 2023. In July 2023 it found 11.9 million independent contractors in their sole or main job, 7.4% of all employment, up from 6.9% in 2017. It counted 6.9 million contingent workers on its broadest measure, 4.3% of employment, against 3.8% in 2017. Smaller groups worked on call (2.8 million), through temporary-help agencies (945,000, a smaller share than in 2017), or for contract firms that place their staff with clients (862,000).

Most contractors prefer the arrangement: 80.3% said so, and 8.3% would rather have a traditional job. The supplement's counts cover only a person's sole or main job, so they miss people who drive, deliver, or freelance on the side. The July 2023 supplement asked again about app-based work, but as of October 2026 BLS had not published those answers, saying only that it intends to. The last official count, for May 2017, found 1.6 million people, 1.0% of the employed, doing short tasks found and paid through an app or website, and BLS had to recode many answers because its questions did not work as intended.

App work differs from a standard job in one way that matters in 2026: in most places there is no interview. Anyone who passes the app's background check, and for rides has a qualifying car, can start, so it stays open when firms slow their hiring, as they have through 2026 (Module 3). It also comes without an employee's protections, and that trade is the legal fight of 10b.

10b. Employee or Contractor: The Legal Fight

Whether a worker is an employee decides who carries the costs and risks of the job. The strictest test in common use is the **ABC test**, which California's Supreme Court adopted in its *Dynamex* decision of 2018 and the legislature wrote into Assembly Bill 5 (AB5), in force from January 2020. Under it a worker is an employee unless the hiring firm shows three things: (A) it does not control and direct the work, (B) the work is outside the usual course of its business, and (C) the worker runs an independent business of that kind. Part B was the problem for the ride companies, because driving is what their customers pay for.

The app companies answered with Proposition 22, a ballot measure that 58.6% of California voters approved. It exempts app-based drivers and couriers from AB5 and keeps them contractors, in exchange for an earnings floor tied to **engaged time**, the minutes from accepting a request to completing it. It adds mileage pay and a health-insurance stipend for those who average at least 15 engaged hours a week. California's Supreme Court upheld it unanimously on July 25, 2024.

For its minimum wage and overtime rules, federal law asks a looser question: does the worker depend on the firm, or run a business of his or her own? On February 26, 2026 the Labor Department proposed to rescind its 2024 rule, which weighed six factors together. It would return to two core factors: how much the firm controls the work, and whether the worker can make or lose money by his or her own choices. A final federal rule would not change California's stricter test for California law.

Other states and one city have kept the contractor label and set a floor under pay instead. The table sets them beside Proposition 22.

Place and rule	Date	Pay floor	Time it counts
California, Proposition 22	Approved November 2020	120% of the minimum wage, plus 30 cents a mile at first, indexed to inflation	Engaged time only
Massachusetts, the attorney general's settlement with Uber and Lyft	Settled June 27, 2024	$32.50 an hour, indexed to inflation	Driving to a pickup and carrying the rider
Minnesota, state law of 2024	In force December 1, 2024	$1.28 a mile and 31 cents a minute, with $5 a ride at least	The miles and minutes of each trip
New York City, minimum pay for app delivery workers	Grocery apps added January 26, 2026	$22.13 an hour before tips, from April 1, 2026	Time on deliveries

Proposition 22's terms as summarized by Gridwise, a driver-data firm (2020); Massachusetts Attorney General's Office, June 27, 2024; KMSP-TV, Minneapolis, November 29, 2024; New York City Department of Consumer and Worker Protection, January 26, 2026.

California has gone further, adding bargaining to the floor. Assembly Bill 1340 came out of a 2025 deal brokered by Governor Gavin Newsom among Uber, Lyft, and the Service Employees International Union (SEIU). It lets rideshare drivers form a union and requires the companies to bargain in good faith, while keeping the drivers as contractors, and it took effect on January 1, 2026. The California Gig Workers Union, backed by three local branches of the SEIU, said in August 2026 that it had cleared the support threshold. On September 9, 2026 the state's Public Employment Relations Board certified it, on evidence that at least 30% of active drivers had authorized it. Reports put the unit at about 800,000 drivers, and the law next requires bargaining over pay.

Europe has acted on classification itself. The Platform Work Directive of the European Union (EU), adopted on October 14, 2024, presumes that a platform worker is an employee when the facts show the platform controls and directs the work, and it puts the burden of proving otherwise on the platform. Member states must write it into national law by December 2, 2026. The ILO followed with the first global standard, Convention No. 193 on decent work in the platform economy, adopted on June 12, 2026 by 406 votes to 8, with 36 abstentions and the American government voting against. It does not require employee status, but it asks ratifying countries to protect pay, social insurance, and the right to organize whatever label a worker carries.

10c. Pay by Algorithm

A taxi meter charges a published rate per mile and minute. A ride app sets the price of each trip, and the driver's pay for it, with software that weighs the time, the place, and the demand at that moment. The driver sees an offer and has seconds to accept or decline it. Because the rider's price and the driver's pay are set separately, the share of the fare the app keeps can change from trip to trip.

Critics say the system lets an app pay each worker the least he or she will accept. The legal scholar Veena Dubal calls it **algorithmic wage discrimination**: pay set person by person from data the worker cannot see, so that two drivers can earn different amounts for the same work. The companies answer that prices that move with demand send drivers to where riders are waiting, which cuts waits for riders and empty time for drivers. Outsiders cannot easily test either claim, because the data stay with the platforms.

The software also manages. It tracks acceptance rates, ratings, and routes, and it can cut a worker off the app, a step called **deactivation** that is the platform's version of firing, sometimes made automatically. The new rules aim here. The EU directive requires platforms to explain how their automated systems monitor and decide, to keep people in charge of decisions such as deactivation, and to limit the personal data they collect. The ILO convention asks for written reasons and human review of any decision that affects a worker's pay or suspends or ends the work.

The pay floors in 10b are the other answer: whatever the software offers, the app must top the driver up to a minimum. Their weak point is the time most of them leave out. A floor that pays only for engaged time pays nothing for the minutes spent waiting for the next request, and in a slow hour those minutes can be half the hour, as the worked example shows.

10d. Second Jobs, Part-Time Work, and Hours

People who want more work than one job gives them can take a second. In September 2026, 8.99 million Americans held more than one job, 5.5% of the employed. The head count set a record of 9.29 million in November 2025, which makes it easy to say that a record number of Americans need two jobs. The share tells a different story: it peaked at 6.5% in November 1996, and the head count grows with the workforce. The November 2025 figure also came in the first month collected after the shutdown gap of October 2025 (Module 2), and it stands well above the months around it.

The other sign of people wanting more work is involuntary part-time work, which BLS calls **part-time for economic reasons**: people working under 35 hours a week because their hours were cut or because they could find only a part-time job. There were 4.5 million in September 2026, slightly fewer than a year earlier. Of them, 2.9 million had their hours cut because business was slack, and 1.3 million could find only part-time work. The 22.8 million who worked part time for other reasons, such as school, family, or health, outnumber them five to one.

Hours per job are also a measure of demand, because employers usually cut hours before they cut people. Average weekly hours for all private-sector employees were 34.4 in September 2026, and 33.8 for production and nonsupervisory workers, both unchanged on the month. Spread across about 136 million private payroll jobs, a fall of a tenth of an hour in the average week removes as much work as about 340,000 full-time jobs. That is why forecasters read the hours figure beside the payroll count.

10e. Where Work Happens

Two surveys measure working from home, and both show it roughly flat since 2023. BLS asks whether a person teleworked or worked at home for pay at any time in the survey week: 22.6% of the employed had in March 2026, against a high of 23.0% two years earlier. A survey of work from home (WFH) run by the economists Jose Maria Barrero, Nicholas Bloom, and Steven Davis, and published as WFH Research, counts full paid days instead. About 26% of paid days were worked from home in September 2026. From October 2025 to September 2026, 12% of full-time employees were fully remote, 26% hybrid (splitting the week between home and the workplace), and 62% fully on site.

Who works at home depends on the job and the degree. In June 2026, 59.0% of workers in finance and insurance and 55.8% in professional and technical services teleworked at least some hours, against 10.2% in construction and 3.9% in hotels and restaurants. In the WFH survey, holders of graduate degrees worked 32.8% of their paid days at home in 2026, against 19.0% for those with a high school education or less. Remote work is mostly a feature of jobs that pay more.

Employers issued many return-to-office orders in 2025 and 2026. A presidential memorandum in January 2025 sent federal employees back to their offices full time, and the federal telework rate fell from 32.8% in January 2025 to 18.2% in April. Amazon and AT&T required five office days a week from January 2025, JPMorgan Chase from March 2025, and Paramount from January 5, 2026. Yet the economy-wide measures barely moved.

Does working from home cost output? The best evidence on hybrid work is a randomized trial at Trip.com, the Chinese travel company, published in *Nature* in 2024 by Nicholas Bloom, Ruobing Han, and James Liang. Of 1,612 engineers, marketers, and finance staff, those chosen at random could work two days a week at home. Their quit rate was a third lower than the office group's, 4.8% against 7.2%, and the trial found no difference in performance reviews, promotions, or engineers' lines of code.

The evidence on fully remote work is mixed. An earlier trial by Bloom and coauthors at the same company's call center, published in 2015, found that home workers performed better, but studies of other call centers and of an information technology firm found losses. A study of software engineers at a large company found that juniors got less feedback on their code when they did not sit near their teammates. That cost falls on the newest workers, the ones a firm is training.

10f. The Four-Day Week

The largest study of a four-day week, by Wen Fan and Juliet Schor of Boston College and their coauthors, was published in *Nature Human Behaviour* in July 2025. It followed 2,896 employees at 141 organizations in the United States, Britain, Canada, Australia, Ireland, and New Zealand that moved to four days for six months with no cut in pay. Each firm first spent about eight weeks cutting low-value work such as unneeded meetings. Burnout fell, and job satisfaction and mental and physical health improved, while a comparison group on five days showed no significant change. More than 90% of the firms kept the shorter week.

The limits matter as much as the results. The firms volunteered, so they were the ones most likely to make a shorter week work, and the outcomes were workers' own reports, not measured output, which the study did not track. A legal cut in standard hours is a different policy, and Mexico's move toward a 40-hour week is an example (Module 11).

10g. Should Gig Workers Be Employees? The Cases as Their Advocates Make Them

The case for employee status: Unions, worker advocates, and many labor economists argue that app drivers and couriers do the core work of the companies that dispatch them. They should have an employee's protections: the minimum wage for all working time, overtime, unemployment insurance, workers' compensation, and a federal right to bargain. Advocates point to net pay: once waiting time and the car are counted, most drivers in the studies earn less than the minimum wage. And they argue that the app's control of prices, assignments, ratings, and deactivation is the control that defines employment, exercised by software instead of a supervisor.

The case for contractor status: The companies, many drivers, and the voters who passed Proposition 22 argue that the job's value is its freedom. A driver can log on for an hour between other jobs, refuse any trip, and work for two apps at once. Employee status would bring shifts, hiring limits, and fewer drivers, with higher fares and longer waits for riders. Most contractors prefer their arrangement (10a). Low pay and missing benefits can be fixed without reclassification, through pay floors, portable benefits, and bargaining, as Massachusetts, Minnesota, and California have done.

What the evidence says: The University of California, Berkeley's Labor Center studied 1,088 drivers on six app platforms in January 2022, using data from a driver-assistant app. Its report of May 20, 2024 found median net pay before tips of $7.12 an hour for rideshare drivers in Los Angeles and the San Francisco Bay Area, and $10.64 in Boston, Chicago, and Seattle. Most drivers in all five areas earned less than the local minimum wage on their net shift earnings. Only 5% of Uber drivers in its California sample received Proposition 22's top-up payments, under a floor measured on engaged time alone. On the other side, a study of Uber's own data by M. Keith Chen, Judith Chevalier, Peter Rossi, and Emily Oehlsen (2019) found that drivers value the flexibility highly. They earn more than twice the surplus (the gain above the least pay they would accept) that they would get in less flexible arrangements. And a floor need not drive the apps away: Uber and Lyft threatened to leave Minnesota in 2024, then agreed to stay under the statewide floor.

The course's reading, stated once: neither label works as it stands. Drivers value the freedom to set their hours, and employee status would cost them much of it, but the contractor label with Proposition 22's floor leaves most drivers below the minimum wage once the waiting and the car are counted. App workers should stay contractors, with a floor per mile and minute or per hour set high enough to cover the unpaid waiting and the full cost of the car, the direction Minnesota and Massachusetts have taken. It should come with the right to bargain over the rest, which California's drivers won in September 2026.

Worked example — A Rideshare Driver's Hour, from the Rider's Fare to the Driver's Pocket

Take a Minnesota driver who completes two rides in an hour, each 10 miles and 15 minutes long, and drives 8 more miles to reach riders, with the rest of the hour spent waiting. The trips and the empty miles are illustrative assumptions, and so is the premise that the app pays exactly the state floor in 10b. Each ride then pays $12.80 for its miles plus $4.65 for its minutes, $17.45, and the hour pays $34.90. The riders paid more. In the fourth quarter of 2025 Uber's ride revenue was 29.9% of its ride bookings, the fares and fees riders paid before tips, $8.2 billion of $27.4 billion (its results of February 4, 2026). If the app keeps that share, also an illustrative assumption, the riders paid about $49.79 and the app kept about $14.89. Now the car. The driver covered 28 miles, and the Internal Revenue Service (IRS) puts the full cost of a business mile, counting fuel, wear, insurance, and the car's loss of value, at 72.5 cents for 2026 (its release of December 29, 2025): $20.30. That leaves $14.60 for the hour before tips. A contractor also pays both halves of the Social Security and Medicare tax, 15.3% of 92.35% of net earnings, about $2.06, leaving $12.54. Two inputs move the answer most. A driver who already owns the car and counts only fuel and wear, the 20.5 cents a mile the IRS allows for medical driving, which counts only variable costs, nets $29.16 before that tax. A driver who gets one ride in the hour and drives 6 empty miles nets $17.45 less $11.60, or $5.85, below even the Berkeley median for California in 10g. The share of the hour spent carrying riders, which depends on demand more than on the driver, decides most of what the hour pays.

Module 10 Key Points

Gigs and Contracts

• In July 2023, 11.9 million Americans, 7.4% of workers, were independent contractors in their main job; BLS has not published its newer app-work count.

• Proposition 22 keeps California's app drivers as contractors with a floor on engaged time; the state certified a drivers' union on September 9, 2026.

• Multiple jobholding set a head-count record of 9.29 million in November 2025, but September 2026's 5.5% share is below 1996's 6.5% peak.

• About 26% of paid days were worked at home in September 2026, flat since 2023; hybrid work cut quitting a third without hurting performance.

• In the worked example, an hour paying $34.90 at Minnesota's floor leaves $14.60 after the car's full cost, or $5.85 with one ride an hour.

• The course's reading: keep app drivers as contractors, with floors that cover waiting time and the car's full cost, plus the right to bargain.

Module 10 Quiz

Check Your Understanding

1. Why is the claim that a record number of Americans hold two jobs only partly true?

A) Second jobs are counted only every few years

B) The 2025 record was revised away by the benchmark

C) The head count set a record in November 2025, but the share of workers with two jobs, 5.5%, is below its 1996 peak

D) Only the count of part-time workers set a record

2. What did the 2024 randomized trial of hybrid work at Trip.com find?

A) Quitting fell by a third, with no measurable loss of performance.

B) Output fell by a fifth.

C) Performance rose, but promotions fell.

D) Managers rated hybrid workers lower and promoted fewer of them over the following two years.

3. What does California's Proposition 22 do?

A) It makes app drivers employees under the ABC test, with overtime and unemployment insurance.

B) It keeps drivers as contractors, with an earnings floor.

C) It bans surge pricing.

D) It lets drivers form a statewide union and requires the companies to bargain with it in good faith.

4. How many Americans were independent contractors in their sole or main job in July 2023?

A) About 6.9 million, 4.3% of workers

B) 11.9 million

C) About 1.6 million, 1.0% of all workers

D) About 8.99 million, 5.5% of the employed, up from 2017 as app work spread

5. What is the course's reading on whether app drivers should be employees?

A) Make them all employees

B) Leave pay to the market, since most contractors prefer the arrangement and the apps would cut service in any state that set a floor

C) Reclassify only full-time drivers, under the federal proposal of 2026

D) Keep them contractors, with floors covering waiting and the car

Module 11 — Work Around the World

From China's Graduates to Europe's Rules

Recommended Reading / Reference

Book: Richard B. Freeman, *America Works: Critical Thoughts on the Exceptional U.S. Labor Market* (2007), a Harvard labor economist's comparison of the American labor market with Europe's, crediting America's job creation while counting what its thinner protections cost

Reference: International Labour Organization, *Employment and Social Trends 2026* (January 14, 2026), the yearly count of the world's unemployed, informal, and working poor, with its May 2026 update on the oil shock

11a. The World's Workforce

The ILO's yearly report on the world's labor markets, *Employment and Social Trends 2026*, was published on January 14, 2026. It projected global unemployment at 4.9% for 2026, unchanged from 2025, or about 186 million people. The rate says less than it seems to, because in countries without unemployment insurance few people can afford to be without work. They take whatever work they can find, so the ILO's other measures say more.

Most of the world's workers are **informal**: their work is not registered with the state, so labor law and social insurance do not reach it. The ILO counts about 2.1 billion informal workers in 2026, and its statistics office put them at 57.9% of the world's employed in 2025. A street vendor, a farmhand paid in cash, and a delivery rider without a contract are all informal workers, with no pension, no sick pay, and no protection against dismissal.

Work is also no guarantee against poverty. In 2025, 284 million workers, 7.9% of the employed, lived in extreme working poverty, in households with less than $3 a day per person, measured at 2021 prices and adjusted for what money buys in each country. The share of world gross domestic product (GDP) that goes to labor, the **labor income share**, was 52.6% in 2025, down from 53.0% in 2015, on a measure built differently from the American ones in Module 4.

The young fare worst. The ILO put unemployment among 15-to-24-year-olds at 12.4% in 2025, two and a half times its rate for all workers. About 260 million people of those ages, a fifth of the age group, were not in employment, education, or training (NEET), and in low-income countries the share was 27.9%.

The oil shock of 2026 (Module 3) has made the outlook worse. In its May 2026 update the ILO estimated that the conflict in the Middle East and the rise in oil prices would cut hours worked worldwide by 0.5% in 2026 and 1.1% in 2027, against a world without the conflict. That is the work of about 14 million full-time jobs in 2026 and 38 million in 2027.

11b. China: The Graduates' Market

China publishes an unemployment rate for urban 16-to-24-year-olds who are not in school. In August 2026 it was 18.9%, up from 17.9% in July, tying the highest reading since the current method began in January 2024. The National Bureau of Statistics released the figure on September 17, 2026, with 7.5% for ages 25 to 29 and 5.3% for the urban workforce as a whole.

The measure has a history. Until mid-2023 the bureau counted students looking for work, and on that measure the rate reached 21.3% in June 2023, after which the bureau stopped publishing it. It resumed in January 2024 with students left out, so the two series cannot be compared. The rate is also seasonal. It rises each summer as graduates start looking for work and eases later in the year, so a year's average runs below the August figure. China expected a record 12.7 million university graduates in 2026, and their arrival pushed the August rate up.

As in America (Module 10), app work in China needs no one's decision to hire. China counts it, with other gig and casual work, as **flexible employment**, and its best-documented flexible workers are the food-delivery riders. A report by Sixth Tone, a Shanghai news site, on September 17, 2026 gathered what is known about them. The average rider is 33, according to Nankai University, and a Peking University survey of more than 30,000 riders found that they stay about six months. About 70% hold rural registrations under **hukou**, the household registration system that ties schooling, health care, and pensions to a person's registered home.

Injury insurance is mandatory for riders, but pension contributions are not required for workers on service contracts. Meituan, China's leading food-delivery platform, began a pension subsidy in the city of Quanzhou in April 2025 and extended it after November 2025. Riders pay half of their state pension contribution and Meituan pays the rest, but take-up has been low.

Young Chinese have a phrase for stepping out of a race with too few prizes: **lying flat** (*tang ping*), doing the minimum needed to live instead of competing for scarce jobs and promotions. It names a mood, not a counted group of workers.

11c. India: A Workforce That Works for Itself

India's statistics ministry runs the Periodic Labour Force Survey, and its annual report for 2025, the first under a new sample design, came out on March 27, 2026. It found unemployment of 3.1% among people aged 15 and over, counted by their main activity over the year. For ages 15 to 29 the rate was 9.9%, and 13.6% in the cities. Women's labor force participation was 40.0%, against 79.1% for men.

The low headline rate hides how Indians work. Of all workers, 56.2% were self-employed, running a farm, a shop, or a trade, while 23.6% held a regular wage or salaried job and 20.2% were casual laborers hired by the day. Agriculture still employed 43.0% of workers. Few people in such an economy can afford to be unemployed for long, so a shortage of good jobs shows up as low-paid self-employment instead of joblessness.

On November 21, 2025 India brought four labor codes into force, on wages, industrial relations, social security, and workplace safety and conditions, enacted in 2019 and 2020. Together they replace 29 central labor laws, the oldest from 1923. Firms with fewer than 300 workers, against 100 before, may now lay off workers or close without government permission. Strikes need advance notice and cannot begin until 14 days after it. App platforms must pay 1% to 2% of their turnover, capped at 5% of what they pay gig workers, into a social security fund for those workers.

The codes take full effect only as each state issues its own rules, and by one Indian legal guide's count only five governments had done so for all four codes as of May 2026. Ten central trade union federations held a nationwide strike against the codes on February 12, 2026. The unions say the codes make dismissal easier and strikes harder. The government says they replace dozens of overlapping laws with four and bring gig workers into social security.

11d. Europe: Uneven Unemployment, Strict Rules

Unemployment in the euro area, the countries that use the euro, was 6.4% in August 2026, and 6.1% in the EU as a whole, according to Eurostat, the EU's statistics office, on October 1, 2026. Across the EU the rates ran from 3.2% in Czechia to 10.3% in Finland, with Germany at 4.0%, Italy at 6.2%, France at 8.2%, and Spain at 10.0%.

Germany's low rate hides a shrinking industry. German industry cut about 124,000 jobs in 2025, about 50,000 of them in the car industry, according to an analysis by EY, the accounting firm, of companies with 50 or more employees. Industrial employment fell 2.3% to about 5.38 million, 266,000 below its 2019 level. Germany's answer to a downturn is **short-time work** (*Kurzarbeit*): a firm in trouble cuts hours instead of jobs, and the federal employment agency replaces part of the lost pay.

France's fight has been over when work ends. A 2023 law raised the minimum retirement age from 62 to 64. In late 2025, to win the Socialists' support, Prime Minister Sébastien Lecornu offered to suspend it, and on December 16, 2025 the National Assembly adopted the 2026 social security budget with the suspension, 247 votes to 232. The suspension took effect on September 1, 2026 and runs to January 1, 2028, freezing the minimum age at 62 years and 9 months for those who reach it through 2027, and the president elected in 2027 is expected to decide what follows.

The EU's treaties leave pay outside the EU's powers, and that limit was tested in court. The EU's 2022 directive on adequate minimum wages asked member states to set and update minimum wages by stated criteria and to promote collective bargaining. On November 11, 2025 the EU Court of Justice, ruling on Denmark's challenge, struck out the paragraph listing the criteria, such as purchasing power and productivity, and a clause on indexation. It rejected Denmark's argument that the directive needed unanimous approval, and the rest stands, including the rules on promoting bargaining.

Britain's Employment Rights Act received Royal Assent on December 18, 2025. From April 2026, statutory sick pay starts on the first day of sickness, paternity and parental leave are available from a job's first day, and a new Fair Work Agency enforces the rules. From January 1, 2027, the time a worker must be employed before claiming unfair dismissal falls to six months, and the cap on compensation is removed. Rights to guaranteed hours for workers on zero-hours contracts, which promise no minimum hours, follow in 2027.

11e. Japan, Mexico, the Gulf, and the Money Sent Home

Japan sets much of its pay in one season. In the **shunto**, the spring wage offensive, unions and large employers bargain at the same time, and the results set a benchmark for the rest of the economy. The final tally of Rengo, the Japanese Trade Union Confederation, released on July 3, 2026, put the average 2026 raise at 5.01%, or ¥16,400 a month. It was the third straight year above 5%, a little below 2025's 5.25%, and unions with fewer than 300 members won less, 4.69%.

Mexico is cutting its legal working week. A constitutional amendment published in the official gazette on March 3, 2026 keeps the 48-hour maximum for 2026, then lowers it to 46 hours in 2027, 44 in 2028, 42 in 2029, and 40 in 2030, with no cut in pay. Overtime is capped at 12 hours a week, and workers keep one rest day a week. The cut reaches only workers whom labor law covers, so Mexico's informal workers will not feel it directly.

The Gulf states rely on migrant workers, and for decades many lived under **kafala**, the sponsorship system that tied a migrant's right to stay in the country to one employer, whose consent the worker needed to

change jobs or leave. In October 2025 Saudi Arabia announced it was abolishing kafala for its more than 13 million migrant workers and replacing it with contracts. The new rules let workers change jobs without the employer's consent when a contract ends, get exit and re-entry visas directly through government platforms, and leave the country after giving notice. Walk Free, an antislavery group, called it a major step but warned that the change had yet to prove itself in practice.

Migrants send much of their pay home. The United Nations' International Fund for Agricultural Development reported in September 2026 that remittances to low- and middle-income countries reached $728.6 billion in 2025, up 94% since 2016, while the number of migrants rose 28%. India received the most, $150.7 billion. Remittances equal 30% of GDP in Honduras, 28% in El Salvador, and 27% in Nicaragua, so a job lost in the United States reaches households in Central America.

11f. How the Rich Countries Compare

The OECD's measure of average hours actually worked per worker, in figures released in July 2026, gave the United States 1,800 hours in 2025, against an OECD average of 1,736. Britain's workers put in 1,533 hours, France's 1,498, and Germany's 1,332, the fewest in the OECD, while Mexico's 2,205 were among the most. The OECD warns that these figures are assembled from different national sources and serve better for following one country over time than for ranking countries.

The table sets out the rules behind those hours: the paid leave the law requires, the national minimum wage, and the share of workers whose pay is set by a union contract.

Country	Paid annual leave the law requires	National minimum wage, October 2026	Share covered by a union contract
United States	None: federal law leaves paid vacation and holidays to employers	$7.25 an hour, federal (Module 9)	11.2% (16.5 million), 2025
Germany	24 working days counted on a six-day week, which is four weeks	€13.90 an hour; €14.60 from January 1, 2027	49% (2024 or latest)
France	2.5 working days a month, five weeks a year	€12.31 an hour; €1,867.02 a month for the legal 35-hour week	98% (2024 or latest)
Britain	28 days, which may include public holidays	£12.71 an hour, age 21 and over, from April 2026	26.1% of employees, 2025
Mexico	12 days after the first year, rising with service (since January 1, 2023)	315.04 pesos a day; 440.87 in the northern border zone	10-20% (OECD estimate for 2015)

Leave: US Labor Department; Germany's Federal Leave Act, section 3; service-public.gouv.fr; GOV.UK; Mexico's Federal Labor Law, article 76. Minimum wages: US Labor Department; Germany's Fifth Minimum Wage Adjustment Regulation (November 5, 2025); service-public.gouv.fr (France's rate after the order of May 22, 2026); GOV.UK; Mexico's 2026 rates as reported by EY Mexico (December 5, 2025). Coverage: BLS (February 18, 2026); OECD and others via Eurofound; UK Department for Business and Trade (May 28, 2026, household survey); OECD (Mexico).

The widest gap is in bargaining. In France unions and employers' associations bargain for whole sectors, and the state extends their agreements to every firm in a sector, so a contract covers nearly every worker although only a minority belong to a union. German sector agreements bind only the firms that join their employers' association, which is why coverage there is far below France's. In the United States a union must win recognition workplace by workplace (Module 8), so coverage tracks membership.

11g. Does Protecting Jobs Cost Jobs? The Cases as Their Advocates Make Them

The case that protection costs jobs: many economists and employers' groups, and the OECD in its Jobs Study of 1994, argue that Europe's rules make firms cautious about hiring. When dismissal is slow and costly, when sector contracts fix pay above what weaker firms can pay, and when benefits are generous, firms add workers only when they are sure they will need them for years. Unemployment is then higher and lasts longer, and it falls on outsiders: the young, migrants, and the long-term jobless, who move between temporary jobs while protected insiders keep theirs. They point to the euro area's unemployment rate, about half again America's (11d and Module 3), and to Spain, where a generation of young workers grew up on temporary contracts.

The case that it does not: unions, many European governments, and economists who defend Europe's model argue that the comparison picks its countries. Germany, with strict dismissal law and sector bargaining, has lower unemployment than the United States (11d and Module 3). Short-time work lets its firms keep skilled workers through a downturn instead of firing them and hiring again later. Secure jobs, on this view, give firms and workers a reason to invest in training, and wide bargaining keeps the lowest wages from falling behind. And America's freedom to fire did not make 2026 a good year to look for work, with its hiring rate back at the level of 2010-12 (Module 3).

What the evidence says: the research supports neither side's simplest claim. Samuel Bentolila and Giuseppe Bertola showed in 1990 that firing costs make firms slower both to fire in bad times and to hire in good times, with little effect on average employment. The OECD's later reviews found the same pattern: strict dismissal rules have no clear effect on total unemployment, but they slow movement in and out of jobs and lengthen spells without work, and the cost falls on the young and others trying to get in. Unemployment rates also differ more among European countries (11d) than between the euro area and the United States, so demand, training, and wage bargaining matter as much as dismissal law.

Spain's 2021 labor reform (Royal Decree-Law 32/2021), in force from 2022, is the clearest recent test. It made temporary contracts harder to use and steered seasonal work into permanent contracts that pause between seasons, the *fijos discontinuos*. The Foundation for Applied Economic Studies (FEDEA), a Spanish research institute, found in June 2026 that the temporary share of employees fell from 25.5% in 2021 to 16.0% in 2024. Temporary contracts made up 46.2% of new entrants' first contracts in 2022-23, against an average of 85.8% in 2014-21. But permanent contracts now end about 100 days sooner, and the share still in place after a year fell from about 75% to under 60%. The churn moved inside the permanent contract, and Spain's unemployment rate is still the euro area's second highest (11d).

The course's reading, stated once: protecting jobs costs few jobs in total, but it shifts the risk of change onto outsiders. Strict rules make existing jobs safer and new ones slower to open, so the cost lands on the young, migrants, and the long-term jobless waiting to get in. America's low-hire market of 2026 (Module 3) has put outsiders in the same position without the rules. A country's labor model is best judged by how fast its outsiders get in, not by how hard its insiders are to fire.

Worked example — A Year at the Minimum Wage in Five Countries

Take a full-time worker paid each country's national minimum in October 2026, with the leave the law requires, both from the table in 11f. Assume a 40-hour week in the United States, Germany, and Britain, France's legal 35-hour week, and Mexico's legal maximum of 48 hours, and leave out public holidays, overtime, and bonuses. These are illustrative assumptions. Currencies are converted at the Federal Reserve's rates for October 9, 2026: $1.1193 a euro, $1.3229 a pound, and 18.399 pesos a dollar. The American works 40 × 52 = 2,080 hours, since no paid leave is required, and earns $7.25 × 2,080 = $15,080. The German is paid for the same 2,080 hours, €13.90 × 2,080 = €28,912, or $32,361, but works 1,920 of them after 20 days' leave: $16.85 for each hour worked. The French worker earns €1,867.02 × 12 = €22,404, or $25,077, and works 1,820 − 175 = 1,645 hours after five weeks' leave: $15.24 an hour worked. The British worker earns £12.71 × 2,080 = £26,437, or $34,973, and works 2,080 − 224 = 1,856 hours after 28 days' leave: $18.84 an hour worked. The Mexican worker is paid 315.04 pesos for every day of the year, rest days included, 114,990 pesos or $6,250, and works 2,496 − 96 = 2,400 hours after 12 days' leave: $2.60 an hour worked. So an American at the federal floor works 160 hours more than the German for 46.6% of the German's pay, though most American workers live in states with higher floors (Module 9). The averages in 11f show the same pattern at full scale. The American's 468 extra hours over the German come to 11.7 forty-hour weeks. The leave German law requires could explain at most 160 of them, about a third, and less in practice, since most American workers get some paid leave from their employers (Module 4). The rest lies in what the law does not set: the agreed week, part-time work, and leave above the minimum, which is where union contracts matter. Where they cover most workers, as in France, the law's floor sits beneath them. Where few workers have one, as in the United States and Mexico, the floor and the employer's offer are all there is.

Module 11 Key Points

Work Around the World

• The ILO projects 4.9% global unemployment for 2026; more telling are its 2.1 billion informal workers, nearly three in five of the employed.

• China's unemployment rate for 16-to-24-year-olds not in school reached 18.9% in August 2026, with a record 12.7 million graduates expected.

• India's 2025 survey found 3.1% unemployment but 56.2% of workers self-employed; four labor codes replaced 29 laws on November 21, 2025.

• Euro-area unemployment was 6.4% in August 2026; across the EU, rates ran from 3.2% in Czechia to 10.3% in Finland.

• Americans worked 1,800 hours in 2025 against Germany's 1,332; a union contract covers 11.2% of American workers against 98% in France.

• The course's reading: protecting jobs costs few jobs in total but shifts the risk of change onto outsiders, the young above all.

Module 11 Quiz

Check Your Understanding

1. What was China's unemployment rate for 16-to-24-year-olds not in school in August 2026?

A) It fell to 14.5%, its lowest in years.
B) It was 21.3%, a new record.
C) It was 18.9%, tying the high under the current method.
D) It held near 17%, as graduates moved into flexible jobs on the delivery apps.

2. What did Saudi Arabia announce in October 2025?

A) The end of kafala, which tied migrants to one employer
B) A 40-hour week by 2030
C) A national minimum wage
D) A ban on hiring migrants

3. What did Spain's 2021 labor reform do, according to FEDEA's 2026 study?

A) It cut temporary contracts sharply, but the new permanent contracts end sooner, so the churn moved inside them
B) It ended temporary contracts
C) It cut Spain's unemployment rate below the euro-area average
D) It raised the pension age to 64

4. On the OECD's measure, about how many hours did the average American worker put in during 2025?

A) 1,332
B) About 1,800
C) 2,205, among the OECD's highest
D) 1,736, the OECD average

5. What is the course's reading on whether protecting jobs costs jobs?

A) Strict dismissal rules are the main reason unemployment in the euro area runs above the American rate
B) Europe's rules raise employment, because secure jobs encourage training and loyalty
C) America should copy Germany's short-time work and sector bargaining
D) It shifts risk onto outsiders more than it cuts jobs

Module 12 — Where Things Stand, and What to Watch

The Argument, the Contradictions, and the Calendar

Recommended Reading / Reference

Book: David H. Autor, David A. Mindell, and Elisabeth B. Reynolds, *The Work of the Future: Building Better Jobs in an Age of Intelligent Machines* (2022), the MIT task force's account of why new technology has not ended work but has changed who gains from it

Reference: The BLS release calendar for 2026 and 2027, which dates the jobs, earnings, turnover, and productivity reports the watch list in this module follows

12a. The Argument on One Page

The course has made one argument from eleven directions. In October 2026 the American labor market holds on to the people already in it and lets new ones in slowly. Layoffs are rare, so a worker with a job seldom loses it. But employers hire at the pace of 2010-12, the long-term unemployed are a growing share of the jobless, and the young and the newly graduated wait longest (Modules 3 and 6).

Most of the forces of 2025-26 act on that same entrance. The labor force nearly stopped growing as immigration fell, so small job gains hold unemployment steady while the door stays narrow (Modules 3 and 7). Artificial intelligence has so far shown up as fewer hires of young workers into the tasks it can do, not as layoffs (Module 5). Higher interest rates and the oil shock slow hiring before they cause firing (Module 3). Even the rules of work weigh most on newcomers: large minimum-wage increases put the least experienced at risk, and unionized firms add jobs more slowly (Modules 8 and 9).

The second half of the argument is about who holds the power. Pay has trailed prices through the oil shock, and the share of output paid to workers is the lowest on record (Module 4). Unions are popular and small (Module 8). And much of the law of work changed in 2025-26 through executive orders, proclamations, and court rulings rather than new laws from Congress: the leadership of the statistics agency, the labor board's independence, bargaining rights and job protection in the federal civil service, and the fees on skilled-worker visas (Modules 2, 7, 8, and 9).

Put together, the costs of change in 2026 fall less on workers who are laid off than on people who are never hired. The institutions that might share those costs differently, the unions, the labor board, and the statistics that measure the problem, are weaker or less settled than they were a few years ago.

12b. Five Contradictions

Each module states its own findings. Read together, they produce tensions that no single module states.

A calm headline over a hard entry. The unemployment rate barely moved in a year when hiring stayed at its slowest pace in more than a decade. Both are true because the labor force barely grew (12a). The rate measures how many people are looking. It does not measure how long it takes to get in, which is where the strain shows.

The most-cited cause of layoffs that are not happening. Employers named AI more often than any other reason for announced job cuts in 2026, in a year when announced cuts fell, and the national productivity

figures show no AI effect yet (Module 5). The measured change is elsewhere, in the hiring of young workers into exposed jobs, which no layoff count records (Modules 5 and 6).

Popular unions with few members, and strikes that win where workers are scarce. Approval of unions is near its highest in decades while membership is near its lowest (Module 8). The strikes of 2026 that won large raises were in hospitals, in health care, the industry adding the most jobs (Modules 3 and 8). A union's leverage, on this evidence, follows the scarcity of its members' skills more closely than public sympathy for unions.

Record investment, a record-low labor share, and falling real pay. In July 2026 the four largest technology companies guided to capital spending of about $720-745 billion for the year, most of it for AI, and the S&P 500 closed at a record 7,818.93 on October 6. Over the same months real hourly pay fell and labor's share of output reached its lowest on record (Module 4). So far the returns from the investment boom have gone mainly to capital, and its effects on work show up mainly as fewer junior hires (Module 5).

Policies that pull in different directions. Federal policy in 2025-26 set out to reward work and train more American workers, with tax deductions for tips and overtime and a goal of a million apprentices (Modules 6 and 9). It also cut the supply of immigrant workers to the industries that rely on them most, such as farming, meatpacking, and construction (Module 7). And the central bank raised rates to hold down inflation in a market that was hiring slowly (Module 3). Each policy has its own rationale, and each side of the political argument defends its own. Together they push the labor market in different directions at once, which makes its course harder to read.

12c. What to Watch

The dates below are the ones that would confirm or overturn the course's readings. Each entry says what the event would show, not what the course has already reported about it.

When	What	Why it matters
October 27-28, 2026	The Fed's rate-setting meeting	A second rise would mean the Fed reads the market as short of workers rather than of jobs (Module 3)
October 30, 2026	The employment cost index for the third quarter	Whether pay keeps falling behind prices through the oil shock (Module 4)
November 3, 2026	The midterm elections, and state ballot questions on work	Control of Congress decides whether any labor law moves, from federal bargaining rights to the minimum wage; the states set their own floors (Modules 8 and 9)
November 5, 2026	Productivity and the labor share for the third quarter	The first place an AI effect on output would show, and whether labor's share keeps falling (Modules 4 and 5)
November 6, 2026	The October jobs report	The first report after the Fed's October meeting, and a test of whether job gains stay near the low breakeven (Modules 2 and 3)
November 2026	The New York Fed's update on recent graduates	Whether the gap between new graduates and all workers widens or starts to close (Module 6)
December 2, 2026	The deadline for EU countries to write the platform-work directive into law	Whether Europe's presumption that gig workers are employees takes effect on time (Module 10)
December 30, 2026	The Labor Department's new wage rule for farm guest workers	What farms must pay H-2A workers after a court struck down parts of the 2025 rule (Module 7)

When	What	Why it matters
January 1, 2027	Minimum-wage increases in many states and cities; Colorado's AI law; Britain's six-month qualifying period for unfair-dismissal claims	The year's largest change in pay floors, and new rules on AI in hiring and on dismissal (Modules 5, 9, and 11)
February 5, 2027	The January jobs report, with the final benchmark revision and new population estimates	Whether 2026's job growth survives its annual correction, and how many workers the new estimates find (Module 2)
Early 2027	Union membership for 2026	Whether the strikes and drives of 2026 move the membership rate at all (Module 8)
March 2027	The second H-1B lottery weighted by wage, for fiscal 2028	Whether the visas shift toward higher-paid jobs, and what becomes of the proposed fee (Module 7)
2027	The labor board's review of its 2023-24 precedents, among them Cemex	How far, and how fast, a board whose members can be removed at will moves labor law (Module 8)
Every month	Announced job cuts and the reasons given; new payroll studies of young workers	Whether AI's footprint stays in hiring or reaches layoffs (Module 5)
2028-30	France's pension suspension ends (January 1, 2028); Hollywood's contracts expire (2030); Mexico's 40-hour week takes full effect (2030)	The next tests of the rules on retirement, AI in creative work, and working hours (Modules 8 and 11)

Dates are as announced by October 18, 2026. Release dates are from the BLS and Federal Reserve calendars; the others are in the modules cited.

12d. The Last Word

The course began with who works and ends with who is let in. For most of the postwar period, the American labor market's great strength was that it was easy to enter and easy to leave: workers moved between jobs, and the young found a first rung quickly, even when the pay was low. The market of 2026 is easier to stay in than to enter. That suits the workers already inside it and costs the ones outside it, and the gap between those two groups is where the decade's questions about AI, immigration, and the power to bargain will be decided.

Those questions will be argued with numbers less precise than a decade ago (Module 2). The reader who follows them will do better with three-month averages than with single reports, with hires and long-term unemployment than with the headline rate, and with what employers do than with what they say about AI. The course's figures are current as of October 2026, and the watch list above is where they will next change.

Module 12 Key Points

Where Things Stand, and What to Watch

• In October 2026 the labor market keeps the employed and admits newcomers slowly: few layoffs, and hiring at its slowest since 2010-12.

• AI's measured effect so far is fewer hires of young workers into exposed jobs, not layoffs or faster national productivity.

• Real pay fell and labor's share reached a record low while AI investment and stock prices set records.

• Much of the law of work changed in 2025-26 by executive action and court ruling rather than by new laws from Congress.

• The course's thread: the costs of change fall less on workers who are laid off than on people never hired.

Module 12 Quiz

Check Your Understanding

1. Why could the unemployment rate stay steady in a year when hiring was the slowest since 2010-12?

A) Layoffs rose enough to offset the hires that were lost

B) Government hiring made up for the private sector

C) The labor force barely grew, so few new jobs were needed

D) The jobs report stopped counting people who left the labor force after the 2025 shutdown, which lowered the measured rate

2. Where does the course find the measured effect of AI on work so far?

A) In a wave of layoffs of experienced office workers at large firms, which the layoff counts record month by month

B) In faster national productivity growth

C) In falling pay for the workers who use it most

D) In fewer hires of young workers

3. Which contradiction does the module draw from the union evidence?

A) Unions represent most workers but have lost public support since the 2023 strikes.

B) Approval of unions is near a high while membership is near a low.

C) Strikes in 2026 won large raises in technology companies, where hiring was weakest.

D) Unions grew fastest in the states with right-to-work laws.

4. What does the module say about how the law of work changed in 2025-26?

A) Much of it changed through executive orders, proclamations, and court rulings, from the labor board to the federal civil service, rather than new laws from Congress.

B) Congress passed a new national labor law that replaced the 1935 act.

C) Most changes came through new union contracts, which now set the terms for most private-sector workers.

D) The states took over the federal labor board, as New York and California planned.

5. What is the course's thread?

A) Unemployment is the best single measure of how American workers are doing in any year

B) AI will replace most jobs within five years

C) The costs of change fall less on workers laid off than on people never hired

D) Unions and minimum wages decide pay more than markets do

Answer Sheet

Answers to every module's Check Your Understanding quiz.

Module	Answers
Module 1 Quiz	1. B 2. C 3. A 4. D 5. C
Module 2 Quiz	1. B 2. A 3. D 4. A 5. D
Module 3 Quiz	1. C 2. B 3. D 4. C 5. A
Module 4 Quiz	1. B 2. D 3. B 4. A 5. C
Module 5 Quiz	1. A 2. D 3. C 4. B 5. A
Module 6 Quiz	1. C 2. B 3. D 4. C 5. A
Module 7 Quiz	1. B 2. D 3. A 4. C 5. B
Module 8 Quiz	1. D 2. C 3. B 4. D 5. A
Module 9 Quiz	1. A 2. C 3. D 4. B 5. D
Module 10 Quiz	1. C 2. A 3. B 4. B 5. D
Module 11 Quiz	1. C 2. A 3. A 4. B 5. D
Module 12 Quiz	1. C 2. D 3. B 4. A 5. C