CHART 1.

STATUS OF THE LABOR FORCE

(Figures shown are for second quarter of 1977, seasonally adjusted)



DEFINITIONS

Employed - Employed persons comprise (a) all those who during the survey week did any work at all as paid employees or worked 15 hours or more as unpaid workers in a family-operated enterprise, (b) all those who were not working but who had jobs or businesses from which they were temporarily absent for personal or noneconomic reasons.

Unemployed - Unemployed persons comprise all those who did not work during the survey week, who made specific efforts to find a job within the past four weeks, and who were available for work during the survey week fexcept for temporary illness. Also included as unemployed are those who were available for work and fail were waiting to be called back to a job from which they had been faid off, or (b) were waiting to report to a new waye or salary job within 30 days.

- Not in the labor force includes all civilians 16 years and over who are neither employed nor unemployed.

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US UNEMPLOYMENT DATA 1890-1985





Annual Unemployment Rates Across Countries

30 =

Percentage



Average Unemployment Duration in Four Regions



Source: OECD Statistics, 1969 - 2021

Mean and Median Duration of Unemployment in the U.S. (Quarterly)



JESSE ROTHSTEIN





Source:B ureauofL aborSt atisticsda ta.

a.B oths eriesa res easonallya djustedm onthlyda ta.

b.Fra ctionofthe un employedw hoha vebe enout of w ork27w eeksor l onger.

Quarterly Unemployment Rate by Race and Age



Annual Female Labor Force Participation Rate



Source: OECD Statistics, 1960 - 2023



Source: OECD Statistics, 1960 - 2023

Percentage

Labor Markets in the Twentieth Century



Figure 10.7. Labor force participation rates of men and women, 25 to 44 years, 1890 to 1990. *Source*: Table 10.1.



Figure 6: Labor Force Participation Rates of Older Men, 1860-1980

Sources and Notes:

65+, Moen and 55-64, Moen: Moen (1987a); 65+, Census: <u>Historical Statistics</u> (1975) series D 34; 55-64, Durand: Durand (1948). See also Costa (1993) for a discussion of these and other series.

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Figure 10.8. Labor force participation rates for two age groups of married (white) women, 1890 to 1990. *Source*: Goldin (1990), table 2.2.



Figure 10.5. Weekly hours of work, 1830 to 1986. Source and notes: Whaples (1990) for all four series: Weeks Report (1830–1880), Commissioner of Labor (1890–1903), Jones (1900–1957), and Owen (1900–1986). Weeks Report series from U.S. Department of the Interior, Census Office (1883) is for scheduled hours among manufacturing workers. See Whaples for possible biases in the data. Commissioner of Labor series was computed by Leo Wolman from U.S. Commissioner of Labor (1905) and includes urban manufacturing and construction workers. Jones series is from Jones (1963) and is for manufacturing workers. Jones corrects for paid vacations, holidays, and sick leave. Owen series is from Owen (1976, 1988) and is for male non-students. The post-Owen data are for all (private, non-agricultural) workers, not just those in manufacturing.

| | Goods | | | Services | | | | | |
|------|-------------------------|---------------|-------|--|------|-------------------|----------|------------|-------|
| Year | Mining and construction | Manufacturing | Total | Transportation and public utilities | | FIRE [∡] | Services | Government | Total |
| 1990 | | 17.4 | 22.7 | 5.3 | 23.5 | 6.1 | 25.7 | 1.6.7 | 77.3 |
| 1980 | 6.0 | 22.4 | 28.4 | | | 5.7 | 19.8 | 17.9 | 71.6 |
| 1970 | 5.6 | 27.4 | 33.0 | 6.4 | 21.1 | | 16.5 | 17.8 | 67.0 |
| 1960 | 6.6 | 31.0 | 37.6 | 7.4 | 21.0 | | 13.7 | 15.4 | 62.4 |
| 1950 | 7.2 | 33.7 | 40.9 | 8.9 | 20.8 | 4.2 | 11.9 | 13.3 | 59.1 |
| 1940 | 6.9 | 33.9 | 40.8 | 9.4 | 20.8 | 4.6 | 11.4 | 13.0 | 59.2 |
| 1930 | 8.1 | 32.5 | 40.6 | 12.5 | 19.7 | | 11.5 | 10.7 | 59.4 |
| 1920 | | 39.0 | 46.4 | 15.7 | 14.6 | 3.3 | 11.3 | 8.6 | 53.5 |
| 1910 | 11.1 | 36.1 | 47.2 | 15.5 | 16.5 | 2.2 | 11.1 | 7.5 | 52.8 |
| 1900 | 11.8 | 36.0 | 47.8 | 15.0 | 16.5 | 2.0 | 11.5 | | 52.2 |

Table 10.2. Industrial distribution of employees on non-agricultural payrolls, 1900 to 1990 (in percentages)

"FIRE = finance, insurance, and real estate.

Note: Because these data are derived from payroll information, they exclude the self-employed and may double-count those with multiple employers. Source: 1900–1970 Historical Statistics (1975), series D 127–141; 1980–1990 Employment and Earnings, vol. 39, no. 1, table 65 for 1990, vol. 29, no. 1, table 1, for 1980.

20th Century occ rock: declining mfct; rise of services Figure 1

Averg C hag p er Decal e in USO cupta ionhan by mont ha es for Two Period s:1 940-1 980 nad 1980-2 010



Source: Bes ed on Katz and Margo (2014), tabe 1.6, panel A, which is bes ed upon the 1920 through 2000 En sus of population IPUMS and 2010 American 6m munity Survey.

Notes: Ob erved long changes in US occupational employment shares over 19404–980 and 19802–010 are scaled b the number of intervening decades to yield average change per decade. Occupations are classified into occupational groups he ed on 1950 occupation codes using the consistent coding of occupations in all years into 1950 codes (the OC 950 variabe) in the IPUMS. Additional details are found in Katzan d Margo (2014, p. 46).

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| Age | 1910 | 1940 | 1990 |
|-------|------|------|------|
| 25-34 | 13.9 | 9.6 | |
| 35-44 | 22.5 | 15.6 | 12.7 |
| 45-54 | 27.3 | 18.3 | 14.4 |
| 55–64 | 30.6 | 20.3 | 19.2 |
| 25–64 | 21.5 | 14.9 | 12.5 |

Table 10.5. Self-employed as a percentage of non-farm (white) males by age: 1910, 1940, and 1990

Note: The 1910 census asked whether an individual was an employee, employer, or "works on own account." For 1910, self-employment is defined here as employer or "works on own account." Some who gave the latter answer may not have been self-employed but were out of the labor force. It is doubtful that all but a few in the age groups given were out of the labor force. I excluded all men with farm-related occupations. The 1940 census asked class of worker, among which "employer" and "works on own account" were possible responses. A far greater fraction of the self-employed in 1940 than in 1910 listed themselves as "works on own account." The percentages listed above exclude those "out of the labor force." To the extent that some individuals in 1910 were not in the labor force, the difference in the two years in the level of self-employment is understated. The 1940 percentages exclude the agricultural population. In the 1990 Current Population Survey selfemployment is defined as "self employed, not incorporated." Only currently employed white males are included in all censuses.

Source: 1910 Public Use Microdata Sample, 1940 Public Use Microdata Sample, 1990 Current Population Survey.

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Figure 10.9. Union membership as a fraction of non-agricultural employment, 1890 to 1992. Sources and notes: Union membership: 1900–1914 Friedman (1999); 1915–1929 Historical Statistics (1975), series D 940; 1930–1970 Historical Statistics (1975) series D 948; 1971–1980 Bureau of Labour Statistics, unpublished data; 1980–1992 Employment and Earnings (January). Private-sector membership: 1960–1982 Troy and Sheflin (1985), table 3.62; 1983–1991 Employment and Earnings (January). The BLS data for 1971–1980 are a direct continuation of series D 948 and exclude members of public and professional employee associations. The data from Employment and Earnings differ from the D 940 series because they are CPS data from households on members of labor organizations, as opposed to data from labor organizations, and they include all members of labor organizations. The total union data in Troy and Sheflin (1985) differ slightly from those in the above sources.

Non-agricultural employment: 1900–1970 *Historical Statistics* (1975), series D 127; 1971–1992 *Employment and Earnings* (January). Private-sector non-agricultural employment excludes those employed by federal, state, and local government.

The union membership data in Friedman (1999) exclude Canadian members of U.S. unions and for 1915–1929 (series D 940) include Canadian members; those for 1930–1991 18 exclude them. The bias in the 1915–1929 series is probably small, on the order of 6 percent, which is what Canadian membership was as a fraction of the total in 1930.

FIGURE 10-2 Union Membership in the Public Sector, 1962-2007

Sources: Richard B. Freeman, Casey lehniowski, and Jeffrey Zax, "Appendix A: Collective Organization of Labor in the Public Sector," in Richard B. Freeman and Casey lehniowski, editors, *When Public Sector Workers Unionize*, Chicego: University of Chicago Press, 1988, pp. 374–75; and Barry T. Hirselt and David A. Macpherson, *Union Membership and Earnings Data Book: Compilations from the Current Population Survey (2008 Edition)*, Washington, DC: Bureau of National Affairs, 2008.



From: Borjas (2005)

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Figure 2 Cross-Country Union Density



Source: 16 ser (2019).

Note: High sectoral coverage countries are Austria, France, Germany, Italy, the Nt herlands, and Nr way. Low sectoral coverage countries are fin ada, Ireland, fip an, Nv Zealand, and the United Kingdom. The Ghent/Scandinavia countries with union insurance are Elg ium, Denmark, Fin land, and Sygden. The comparison here is restricted to balan ced sample of countries. Union density is as a share of employed wage workers as in employment or household surveys. Sectoral coverage means that a union negotiates In ding national or regional wage agreements. 566

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Figure 10.1. Real annual earnings of manufacturing-sector workers, 1900 to 1991 (1987 dollars). Sources and Notes: Earnings 1900–70: Historical Statistics (1975), series D 740; earnings 1959–91; National Income and Product Accounts, table 6.6B–6.6C. Price deflator 1900–60: Historical Statistics (1975), series E 135, consumer price index (BLS); 1961–88: Economic Report of the President, implicit GNP deflator for all consumption. Deflators are scaled to 1987 dollars. Manufacturing sector includes production and non-production workers.



Source: Autor, Katz and Kearney - unpublished

Figure 7a

Cumulative Log Change in Real Weekly Earnings at the 90th, 50th and 10th Wage Percentiles 1963-2008: Full-Time Full-Year Males and Females



Source: March CPS data for earnings years 1963-2008. For each year, the 10th, median and 90th percentiles of log weekly wages are calculated for full-time, full-year workers.

Source: Acemoglu and Autor (2011)





Sample for panel A is full-time, full-year workers from March CPS for earnings years 1963–2005. Sample for panel B is CPS May/ORG, all hourly workers for earnings years 1973–2005. Processing of March CPS data A is detailed in table 1 and figure 1 notes. For panel B, samples are drawn from May CPS for 1973 to 1978 and CPS Merged Outgoing Rotation Group for years 1979 to 2005. Sample is limited to wage/salary workers ages 16 to 64 with 0 to 39 years of potential experience in current employment. Calculations are weighted by CPS sample weight times hours worked in the prior week. Hourly wages are equal to the logarithm of reported hourly earnings for those paid by the hour and the logarithm of usual weekly earnings divided by hours worked last week for nonhourly workers. Top-coded earnings observations are multiplied by 1.5. Hourly earners of below \$1.675/hour in 1982 dollars (\$2.80/hour in 2000 dollars) are dropped, as are hourly wages exceeding 1/35th the top-coded value of weekly earnings. All earnings are deflated by the chain-weighted (implicit) price deflator for personal consumption expenditures (PCE). Allocated earnings observations are excluded in all years, except where allocation flags are unavailable (January 1994 to August 1995). Where possible, we identify and drop nonflagged allocated observations by using the unedited earnings values provided in the source data.

The college/high school wage premium series depicts a fix-weighted ratio of college to high/school wages for a composition-constant set of sex-education-experience groups (two sexes, five education categories, and four potential experience categories). See table 1 notes and data appendix for further details.

The overall 90/10 inequality series depicts the difference between the 90th and 10th percentile of log weekly (March) or log hourly (May/ORG) male earnings. The residual 90/10 series depicts the 90/10 difference in wage residuals from a regression of the log wage measure on a full set of age dummies, dummies for nine discrete/schooling categories, and a full set of interactions among the schooling dummies and a quartic in age.



FIGURE 1. CUMULATIVE CHANGE IN REAL WEEKLY EARNINGS OF WORKING-AGE ADULTS AGES 18-64, 1963-2017

Nb s: Figure uses March Current Population Survey Annual Social and Economic Supplement data for earnings years 1963 to 2017. Series correspond to (composition-adjusted) mean log wage for each group, using data on full-time, full-year workers ages 16 to 64. The data are sorted into sex-education-experience groups of two sexes, five education categories (high school dropout, high school graduate, some college, college graduate, and post-college degree), and four potential experience categories (0–9, 10–19, 20–29, and 30–39 years). Educational categories are harmonized following the procedures in Autor, Katz, and Kearney (2008). Log weekly wages of full-time, full-year workers are regressed in each year separately by sex on dummy variables for four education categories, a quartic in experience, three region dummies, black and other race dummies, and interactions of the experience quartic with three broad education categories (high school graduate, some college, and college plus). The (composition-adjusted) mean log wage for each of the 40 groups in a given year is the predicted log wage from these regressions evaluated for whites, living in the mean geographic region, at the relevant experience level (5, 15, 25, or 35 years depending on the experience group). Mean log wages for broader groups in each year represent weighted averages of the relevant (composition-adjusted) cell means using a fixed set of weights, equal to the mean share of total hours wabed by the chain-weighted (implicit) price deflator for personal consumption expenditures. Earnings of less than \$67/week in 1982 dollars (\\$112/week in 2000 dollars) are dropped. Allocated earnings observations are excluded in earnings years 1967 forward using either family earnings allocation flags (1967–1974)



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What's up with wages: Atlanta FRB wage change tracker



Figure 10.11. Wage dispersion across the past half century: the ratio of the weekly wage at the ninetieth and tenth percentiles, 1940 to 1985. *Sources and notes*: Goldin and Margo (1992), table I. The sample includes men (older than 21 years) who worked more than 34 hours in the survey week and more than 39 weeks during the year, were wage or salary earners, and earned more than one-half the prevailing minimum wage on a full-time basis.



FIGURE 5-1 Relative wages of White and Black males: Trends in Black-White wage ratio, 1940-1990. Reprinted with permission from George Borjas, John F. Kennedy School of Government, Harvard University.

| TABLE 5-1 Adjusted Black/White |
|-----------------------------------|
| Earnings Ratios Based on Years of |
| Experience, 1971, 1981, 1988 |

| | Years of Experience | | | | | |
|------|---------------------|-------|------|--|--|--|
| Year | 0-9 | 10-19 | 20+ | | | |
| 1971 | 0.88 | 0.78 | 0.79 | | | |
| 1981 | 0.85 | 0.80 | 0.83 | | | |
| 1988 | 0.82 | 0.84 | 0.84 | | | |

Note: Adjusted for differences in education, veteran and marital status, region, urban residence, number of children, and hours worked.

SOURCE: Blau and Beller (1992). Reprinted by permission.



Figure 10.13. Gender differences in earnings, 1820 to 1992. Sources and notes: Manufacturing: 1820–1930 Goldin (1990), table 3.1. New England data used for 1820 to 1850; weekly full-time used for 1930. All sectors: 1900 and 1930 Goldin (1990), table 3.2; 1955–1969 Goldin (1990), table 3.1, median year-round earnings; 1971–1987 Goldin (1990), table 3.1, median weekly wage and salary income; 1988–1992 Employment and Earnings.



Figure 2 The Gender Gap by Schooling

Figure 1c: Percent of Adults with Four-Year 6 llege Degree by Age 35⁷



Source: Census IPUMS 1 percent samples for years 1960 and 1970, Census IPUMS 5 percent samples for years 1980, 1990, and 2000 and American Community Survey (ACS) 2010.

Figure 20: Fraction of Twelfth-Graders Expecting to Obtain a B.A. by Sex and Parents' Education, 1979-2007⁹⁸



Source: Brian L. Jacob and Tamara Linkow Wilder, Using data from the Monitoring the Future survey.

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