

# Compensation from before World War I through the Great Depression

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The pre-World War I period saw political and economic reform and a volatile economic climate that heralded a new era for the United States. During this period, immigration was a major force, with nearly 9 million immigrants entering the United States between 1900 and 1910. Later, the country became embroiled in the Great War, which required the Federal government for the first time to attempt to place significant controls over the economy. After the transition from the war, the country experienced an extended period of prosperity that ended in 1929 and when the country entered the Great Depression. The depth of the Depression would ultimately provide the catalyst for a change in how workers viewed self-sufficiency that would, in turn, give way to changes in how American workers were paid.

## Pre-World War I reform and economic volatility

At the turn of the 20th century, the United States was about to enter a new era. Most areas of the country had become populated, the frontier had disappeared, and the country was about to become a world power. The United States had survived civil and foreign wars, suffered through recessions and panics, and had seen the formation of a business economy that would eventually produce the highest standard of living on Earth.

A significant feature of the early 1900s was growth in the average size of establishments.<sup>1</sup> This size increase was made possible by, among other factors, the heightened availability of

electricity and growth in the size of markets for goods. Larger establishment size tended to provide economies of scale and reduce competition.

Another notable feature of the early 1900s was volatility in business conditions. There were recessions or depressions in 1902-04, 1907-08, and 1910-12, due, in part, to the absence of a mechanism to limit the effect of runs on banks or to control the money supply.<sup>2</sup>

The Federal Government played a pivotal role during this period, helping to usher in a period of reform. The watch words of the day were eliminating corporate abuse, trustbusting, reducing tariffs, reforming banking, protecting natural resources, creating new sources of government revenues, and improving workers' living and working conditions. Several new laws were enacted: The Hepburn Act of 1906 provided the Interstate Commerce Commission authority to regulate railroads; a pure-food law in 1906 forbade the use of "deleterious drug, chemical or preservative"; the 16th Amendment to the Constitution (1913) authorized the Federal income tax; and the Clayton Antitrust Act of 1914 limited the use of injunctions in labor disputes and provided that picketing and certain other union activities were not to be considered unlawful.

Although some improvements had been made, working conditions were harsh at the beginning of the 20th century. During these early years of the century, pay was low, workweeks were long, business conditions were volatile, competition for jobs was intense (due, in part, to immigration) and em-

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ployees were unquestionably subject to the doctrine of employment-at-will.<sup>3</sup> Also, there was little compensation beyond the paycheck. For example, retirement income depended almost exclusively on what one saved during one's working life,<sup>4</sup> and there was no government or employer aid if workers suffered job-related injuries or lost their jobs. The first major social insurance program in the United States—workers' compensation, which compensates workers for injury on the job through exclusive State insurance funds—was adopted first in Washington and Ohio in 1911.<sup>5</sup>

Job insecurity, low pay, and poor working conditions led to labor unrest, as indicated by the growth in union membership and by several major strikes. Trade union membership in the United States<sup>6</sup> rose in the following manner in the early 20th century:

Year	Total membership (thousands)
1900	791
1905	1,918
1909	2,116
1915	2,560

In 1902, miners conducted a 5-month strike against anthracite coal mine operators. Other noteworthy strikes during this period occurred in the textile, iron, railroad, clothing, and mining industries.

*Increased Role of the Bureau of Labor (predecessor of the Bureau of Labor Statistics).* In such an atmosphere, there was increased demand for "regular and adequate statistical data relating to wages." Around 1890, the Commissioner of the Federal Bureau of Labor (later the Commissioner of the Bureau of Labor Statistics) began to supervise the collection of average rates of pay by occupation, industry, and region and for selected occupations, by city and State. These data were presented in an annual report or in the Labor Bureau's bimonthly bulletin.

During the winter of 1900-01, the Bureau expanded its data-collecting

program, launching a study of occupational wages by industry, collecting the average hourly earnings in major occupations in the leading manufacturing and mechanical (such as construction) industries. Published in 1905, as the Commissioner's *Nineteenth Annual Report*, the volume provided data for 1890 to 1903, covering 519 important and distinctive occupations in 3,475 establishments in 67 manufacturing and mechanical industries. These data included actual and relative wages and hours by occupation, relative wages by industry, and relative wages and hours for all industries covered. The report described in detail how data were collected and tabulated. It expressed confidence in the quality of the data, because "...all the field work for this report was carefully done by experienced agents of the Bureau."<sup>7</sup>

After 1907, there was a 4-year lull in the Labor Bureau's wage survey program, due to pressure of other work, such as a special study of wages and working conditions of women and children. A 1912 wage study of cotton goods manufacturing and finishing industries added job descriptions to help ensure that identical occupations were surveyed over time. Also in 1912, the Labor Bureau began studies of union wage scales and hours of work in construction, newspaper printing, and several other industries, with data carried back to 1907.

In 1911-12, the Labor Bureau published a four-volume study of the "condition of employment" in the iron and steel industry, at the request of the U.S. Senate. Agents of the Bureau of Labor visited more than 100 plants throughout the United States to survey the wages and working conditions in the industry. In 1911, the Labor Bureau published average hourly earnings for *productive* occupations, such as laborers, melters, hammermen, heaters, cinder men, and steel pourers. In 1912, the Labor Bureau reported on the trend of wages from 1900-10 for all classes of laborers working in blast furnaces, Bessemer converters, open-hearth furnaces, blooming mills, bar mills, and rod mills; the data provided the percent of

workers in various wage rate ranges at each of these six types of facilities. The report also included hourly rates for common laborers.

Meanwhile, because of the "marked growth in the application of insurance," the *Twenty Third Annual Report of the Commissioner of Labor* (1908) was devoted to a benefit study, "Workmen's Insurance and Benefit Funds in the United States." This study reported on current workmen's insurance, which protected workers against sickness, accident, death, old age, and other adversity. It involved three general types of insurance funds: those maintained by or as adjuncts to labor organizations; those found in a common place of employment (usually limited to the employees of a particular establishment); and those maintained by industrial benefit societies, without regard to common employment or affiliation with any particular labor organization. The study analyzed local labor organization benefit funds, railroad relief funds, establishment benefit funds, hospital funds, miscellaneous funds, industrial benefit societies, and State and savings banks' insurance:

The investigation discloses that nearly all of these funds attempt to accomplish no more than to relieve immediate necessities. The two principal classes of benefits are for death and for temporary disability. The benefit paid on the death of a member usually is no more than enough to pay funeral expenses, although some few societies provide a much more substantial sum.

The temporary disability benefits are generally designed to cover partially the loss of earnings occasioned by an illness of ordinary length or by an accident. In no case is it the purpose to pay a benefit greater than the wages lost. Generally a benefit is not paid for an illness of less than one week; but for loss occasioned by accident, especially if occurring while on duty, benefit is usually paid from the date of injury. Temporary benefits... are limited to a definite period, varying from a few weeks to several months.<sup>8</sup>

### World War I and prosperity

The first major attempt at government control of the economy occurred dur-

Table 1. Union scales of wages and hours of specified occupations, Chicago, 1913-25

Occupation	1913 Hours per week	1913 Earnings per hour	1920 Hours per week	1920 Earnings per hour	1925 Hours per week	1925 Earnings per hour
Bricklayer .....	44	\$.750	44	\$1.250	44	\$1.500
Painter .....	44	.650	44	1.250	44	1.500
Plumber .....	44	.750	44	1.250	44	1.205
Stonecutter .....	44	.625	44	1.250	44	1.375
Typesetter <sup>1</sup> .....	48	.500	48	.988	44	1.191

<sup>1</sup>In the newspaper industry.

ing World War I, as the Nation quickly shifted more than 20 percent of national production to wartime needs.<sup>9</sup> During these hostilities, the War Industries Board determined industrial priorities, fixed prices, and converted plants to meet Federal Government needs. Many government functions that would be taken for granted a half-century later had their origins at this time.<sup>10</sup>

The War Labor Board, established to settle industrial disputes, became the model for a national system of labor-management relations in the 1930s. For the emergency period during the War, union representatives on that board won the right of workers to join unions and not be discharged for union activity.<sup>11</sup> The U.S. Housing Corporation built housing for defense personnel, beginning the Federal involvement in the Nation's housing market. The U.S. Railroad Commission took control of the Nation's railroads. The Food Administration and Fuel Administration coordinated food and fuel distributions, respectively.<sup>12</sup>

Trade union membership almost doubled from 1915 to 1920—years of war and postwar economic boom. During this time, the Federal Government, for the first time, treated the labor movement as a legitimate representative group.<sup>13</sup> From a high point of 5 million members in 1920, however, there was an almost continual decline in union membership until the bottom was reached in 1933.<sup>14</sup> After major strikes in 1921-23 (including an unsuccessful attempt to organize the steel industry), trade unions were unable to exercise direct pressure on employers for almost a decade, until the passage of the Wagner Act in 1935, which promoted unionization and collective bargaining.<sup>15</sup>

As had been the case earlier, the compensation studies conducted by the Bureau of Labor Statistics during World War I were authorized by Congress, to address specific needs. The War Industries Board had been created to increase production, mobilize the labor force, maintain peaceful labor-management relations, and stabilize prices and wages. At this time, the Bureau worked closely with the War Board's Central Bureau of Planning and Statistics.<sup>16</sup> In addition, wartime demands from various other agencies for information on wages and hours, strikes and lockouts, and labor placed additional requirements on the Bureau.

Not until the war was nearly over in late 1918, however, was funding allocated for the Bureau to undertake wage surveys for use in the solution of labor problems in a number of industries and to provide a record of industrial conditions at the height of the war effort.<sup>17</sup> Continuing to use procedures begun in 1913, agents specialized in certain industries and became "...more familiar with the nature of the work in the various occupations."<sup>18</sup> The Bureau's regular, pre-war program had included only 10 industries surveyed at 2-year intervals. In May 1920, results of wages and hours surveys during 1918 and 1919 were published for fully 780 occupations in 28 industries.<sup>19</sup>

In what today might be called a vision statement, the work of the BLS was outlined in 1927:

Primarily the Bureau of Labor Statistics is a fact-finding agency. Its duty as set forth in the act creating it is to 'collect information upon the subject of labor . . . and the means of promoting the material, social, intellectual, and moral prosperity' of the wage earners of this country. The

function of the Bureau is thus somewhat broader than what is commonly understood by the word *statistics*. Its field of work not only covers purely statistical data, but also includes other subjects of vital human welfare, such as accident prevention, housing, labor legislation, and social insurance in all its phases.<sup>20</sup>

The 1920s were not always favorable for this vision, as public attitudes and policies encouraged business interests.<sup>21</sup> The Bureau found little opportunity to expand or improve its work during this period,<sup>22</sup> although it did expand coverage of industry wage studies into 20th century manufacturing industries and expanded into newly emerging compensation practices, such as bonus systems and pay for overtime, Sunday, and holidays.<sup>23</sup> Although surveys were confined to manual jobs and largely selected jobs in the manufacturing sector, these surveys provided a reasonably consistent body of data on both the structure and trend of wages for industrial workers.<sup>24</sup>

During this retrenchment period, the Bureau was able to continue one of its oldest programs, union scales of wages and hours of labor, which dated back to the late nineteenth century. Data were collected for occupations in five industries—bakeries, building trades, marble and stone trades, metal trades, and printing—for localities throughout the country. As an example, wages and hours from 1913 to 1925 in Chicago for several trades are summarized in table 1.<sup>25</sup>

The Bureau also undertook various studies of workmen's compensation, legal aid, and social insurance programs, often in reaction to changes in the law. For example, following the passage of amendments to the Federal retirement system in 1926, the Bureau conducted a survey of 46 State and municipal pension plans, publishing the results by 1929, along with information on public retirement systems in Canada and Europe.<sup>26</sup> The cost of benefits, however, was still a very small part of a worker's compensation package, accounting for less than three percent of the employer's cost for employee compensation.<sup>27</sup>

An early example of one of the Bureau's studies of retirement systems was data published on a retirement plan for employees of the State of New Jersey. This retirement system for these employees was created in March 1921, with contributions starting in January 1922 and pensions first being paid in July 1922. Membership was optional for current employees but mandatory for all new employees. Contributions from the State and employees were "sufficient to secure upon retirement at age 60 an annuity amounting to 1/140 of their final average compensation for each year of service rendered." For example, an employee retiring after 35 years of service would be entitled to an annuity valued at one-quarter (35 X 1/140) of the final average compensation. Retirement was optional at age 60 and compulsory at 70.

In 1926, the Bureau conducted a comprehensive study of workers' compensation. At that time, all but five States had enacted workers' compensation laws to protect workers from losses resulting from injuries on the job. Nearly all these States had passed their initial legislation by 1919 and had subsequently expanded the scope of the acts, increased the amount of benefits, and reduced the amount of time before receiving benefits.<sup>28</sup> Benefits in these States<sup>29</sup> covered fatal—as well as non-fatal—injuries and medical and surgical benefits. In most States, compensation benefits were based on a percentage of average wages, ranging from one-half of average wages in 16 States to two-thirds of average earnings in 12 States. Maximum payments ranged from \$3,000 to \$7,800 for death and from \$3,000 to \$10,000 for permanent total disability.<sup>30</sup>

The Bureau also conducted another survey in 1926,<sup>31</sup> following up on an earlier survey of the existence of "industrial establishments offering insurance to their employees under the group plan."<sup>32</sup> "After 1916, the amounts of group insurance being written increased very rapidly ... In the earlier study only 32 of the companies had inaugurated a group insurance plan, while in the present study 186 compa-

nies with 672,468 employees were found to have such a plan in effect."<sup>33</sup> "The earlier group life insurance policies provided for payment of a lump sum in case of death, the amount of the insurance usually ranging from \$200 to \$1,000 and frequently increasing with each year of service." In 1922-3, group accident and sickness policies were first written as added features of many group life-insurance policies and the "...contributory features became even more marked. In many establishments the employer arranged for combination group life, sickness and accident insurance, part of the premium to be paid for by the worker, while in other cases the employer paid for the life insurance and the employee paid for the sickness and accident insurance."<sup>34</sup> The usual minimum life insurance benefit was \$500, with many plans varying by an employee's annual salary and length of service.<sup>35</sup> Sickness and accident insurance provided benefits for non-occupational injuries, usually "for periods of 13 weeks, 26 weeks, or occasionally 52 weeks," with benefits being paid according to salary class.<sup>36</sup>

### **The Great Depression and the Federal role in the economy**

The Great Depression, a long and severe period of economic decline, affected the United States and the entire industrialized world. The American stock market declined by nearly 90 percent from 1929 to 1932, ruining individual investors and financial institutions. Many banks and other businesses were forced into insolvency. The resultant sharp declines in consumer demand and capital investment led to greatly reduced levels of spending, production, and gross national product (GNP).

From an estimated annual rate of 3.3 percent during 1923-29, the unemployment rate rose to a peak of about 25 percent in 1933. The economy reached its trough in 1933; but although unemployment had reached its peak, economic recovery was slow, hesitant, and far from complete. As shown below, the unemployment rate was still nearly 15 percent in 1940.<sup>37</sup>

<i>Year</i>	<i>Unemployment rate</i>
1923-29	3.3
1930	8.9
1931	15.9
1932	23.6
1933	24.9
1934	21.7
1935	20.1
1936	17.0
1937	14.3
1938	19.0
1939	17.2
1940	14.6
1941	9.9
1942	4.7

Herbert Hoover, who had been elected President at nearly the peak of the economic boom of the 1920's, was presented with an economic situation for which precedents were few. At the time, it was generally felt that economic laws made departures from full employment self-correcting.<sup>38</sup> However, the deepening of the downspin cast doubt on policy based on this view, and a new administration was elected in 1932 on a platform of more active economic policy.

In March 1933, Franklin D. Roosevelt was inaugurated President and initiated a series of aggressive measures, collectively known as the New Deal, in an attempt to revive the economy from the Depression. New Deal legislation brought unprecedented Federal Government involvement to the economy.

The Great Depression also resulted in the unprecedented involvement of the Federal Government in labor-management relations. The passage of the National Labor Relations Act (Wagner Act) of 1935 guaranteed the rights of workers to join labor unions and to bargain collectively with their employers. The impact of unionization on the wages and benefits of blue-collar workers in important manufacturing industries also spilled over into non-union workplaces and industries. Union membership rates, which had been about 1 in 8 workers in the early 1930s, doubled to more than 1 in 4 workers in 1940:

<i>Year</i>	<i>Union membership rate</i> <sup>39</sup>
1930	12.3
1935	13.8
1940	27.6

Industrial workers in the mass-production industries—steel, automobiles, rubber, and electrical equipment—were organized during this time. In 1935, eight industrial unions formed the Committee for Industrial Organization within the American Federation of Labor (AFL), which was dominated by the craft unions. Three years later the CIO split completely from the AFL and became a separate entity, the Congress of Industrial Organizations (CIO).

In addition to becoming involved in labor-management relations, the Federal Government became involved in establishing wage standards at this time. For example, the passage of the Davis-Bacon Act of 1931 created the establishment of wage standards for workers employed by contractors or subcontractors employed on construction projects financed by the Federal Government. A second piece of legislation, the Walsh-Healey Act of 1936, established a prevailing wage for workers employed by firms providing materials and supplies to the Federal Government. Finally, the Fair Labor Standards Act of 1938 established a minimum wage (\$.25 per hour)<sup>40</sup> for most workers involved in producing goods for interstate commerce.

The Great Depression also brought a different approach to viewing economic security. Americans became aware that individuals were not always able to provide for their own security in a modern industrial society. Before 1934, workers' compensation was typically the only help available to workers.<sup>41</sup> Workers had no protection against loss of income for any cause other than industrial accident, except their own savings, organized charity, and local relief agencies.<sup>42</sup> Surprisingly, there was little support for social insurance programs other than workers' compensation before 1930. In 1931, for instance, a national AFL convention refused to endorse unemployment insurance legislation.<sup>43</sup>

The roots of the New Deal had been planted during early debates about compulsory State insurance and workers' compensation.<sup>44</sup> But it wasn't until the devastating economic disaster

of the 1930s that most Americans became convinced of the necessity of a permanent national plan for coping with severe losses in income.<sup>45</sup> Subsequently, Congress passed the Social Security Act of 1935, which provided two social insurance programs—a Federal system of old-age benefits for retired workers and a Federal-State system of unemployment insurance. The Social Security Act also established a series of Federal grants to the States for additional old-age assistance, aid to the blind, and aid to dependent children.<sup>46</sup>

In addition to providing compensation for lost income, the passage of the Social Security Act and the Wagner Act in 1935 signaled the beginning of the concept of compensation as more than just traditional straight-time pay for time worked. Unions began to deviate significantly beyond the traditional scope of collective bargaining—wages, hours, and working conditions—and began to negotiate compensation packages that would give workers more and better welfare plans than were provided by legally required plans.<sup>47</sup> Consequently, supplements to wages and salaries, including legally required benefits and private health and welfare plans, although still accounting for less than that 4 percent of compensation costs in 1939, had more than doubled in value in the previous 10 years.<sup>48</sup>

Between 1932 and the end of the decade, the Bureau's wage survey activity was primarily geared to the information needs of the new Federal agencies created by the New Deal; and the Bureau expanded, with a doubling of staff and budget between 1934 and 1941.<sup>49</sup> In place of the periodic study of major industries, the Bureau studies of minimum wage and maximum hour provisions were needed for industries to meet the "codes of fair competition" required by the National Industrial Recovery Act (NIRA) of 1933. Major comprehensive studies, including information on working conditions—as well as wages—covered a diverse set of industries and occupations.<sup>50</sup> Several studies were also undertaken in cooperation with the Works Progress Administration

(WPA), as well as surveys done in connection with the Walsh-Healey Act that covered work performed by Federal government contractors.<sup>51</sup>

Because of the need for data for minimum wage determinations under the Fair Labor Standards Act of 1938, which initially provided for a minimum wage by industry, the Bureau conducted about 45 industry wage surveys during 1938 and 1939.<sup>52</sup> Most of these studies provided data on the distribution of workers in low-wage industries by straight-time hourly earnings, without occupational detail.<sup>53</sup>

One example of the studies necessitated by the NIRA and conducted by BLS was the survey in March 1935 of the manufacturing of cigarettes and tobacco products industry.<sup>54</sup> This survey covered approximately 38,000 workers in 48 plants. A summary of the article concerning the survey found, "Most of the plants used both piece- and time-rate methods of wage payments. A noteworthy improvement in weekly hours and payment of higher rates for overtime was found in 1935, as compared with the situation existing prior to the National Industrial Recovery Act."<sup>55</sup> Paid holidays and vacations were generally limited to salaried workers, and pay for lost time due to sickness was rarely provided by a formal plan. Insurance benefits were limited. "A number of the companies, especially the large ones, had welfare programs covering one or more of such measures as medical care, group insurance of various kinds, thrift clubs, and lunch rooms. Approximately half of the employees were, by such programs, provided access to medical services beyond first-aid attention."<sup>56</sup>

Another example is a survey conducted with the WPA of the building construction industry in the fall of 1936 for information on prevailing wage rates. Information was gathered from over 6,000 contractors involved in more than 13,000 projects in 105 cities across the country.<sup>57</sup> Average earnings for the 186,145 workers were \$.918 per hour. Earnings for electricians, bricklayers, and structural ironworkers averaged more than \$1.30 per hour. Laborers

earned \$.516 per hour. Earnings for union workers were significantly higher in comparable trades than for their non-union counterparts. For example, union electricians earned nearly 60 percent more per hour than their nonunion counterparts.<sup>58</sup>

Paid vacations were one of the rapidly growing employee benefits during the 1930s. In 1937, a BLS survey of 90,000 firms found that approximately 95 percent of the 700,000 salaried workers received annual vacations with pay,

compared with 36.7 percent of the 9.5 million wage earners.<sup>59</sup>

For salaried workers, most paid vacation plans were initiated between 1920 and 1930. Vacations were practically all for either a 1- or 2-week period, with 2 weeks reported for 57 percent and 1-week plans for 37 percent of salaried workers.<sup>60</sup> The usual length of service to be eligible for a vacation was 1 year, reported for 80 percent of the plans. For graduated plans, the 1-week minimum and 2-week maximum vaca-

tion was almost universal.<sup>61</sup>

For wage earners, survey results indicated approximately 70 percent of plants reported initiating a paid vacation plan during the 1930-37 period; and about 40 percent gave vacations for the first time in 1937.<sup>62</sup> Wage earners were typically eligible for a vacation after 1 year of service, although 40 percent required 2 years'; and 20 percent required 5 years' or more service.<sup>63</sup>

<sup>1</sup> Martin L. Primack and James F. Willis, *An Economic History of the United States* (Menlo Park, CA, Benjamin/Cummings Publishing Company, 1980), pp. 298-300. (An establishment is a single physical plant location.)

<sup>2</sup> *Ibid.*, p. 282.

<sup>3</sup> George T. Milkovich and Jennifer Stevens, "Back to the Future: A Century of Compensation," Working Paper 99-08 (Ithaca, NY, Cornell University Center for Advanced Human Resource Studies, July 1999), p.6.

<sup>4</sup> There is some disagreement with the view that, during the early 20th century, males worked until they died (that is, they had no opportunity for voluntary leisure after years of remunerative labor). A study showed that more than a fifth of males employed at late middle age left employment before their death. See Susan B. Carter and Richard Sutch, "Myth of the Industrial Scrap Heap: A Revisionist View of Turn-of-the-Century American Retirement," Historical Paper 73 (Cambridge, MA, National Bureau of Economic Research, 1995), p. 1.

<sup>5</sup> Price V. Fishback and Shawn Everett Kantor, "A Prelude to the Welfare State: Compulsory State Insurance and Workers' Compensation in Minnesota, Ohio, and Washington, 1911-1919," *NBER Working Paper Series on Historical Factors in Long-run Growth*, Historical Paper 64 (Cambridge, MA, National Bureau of Economic Research, 1994), pp. 2-23.

<sup>6</sup> John T. Dunlop and Walter Galenson, eds., *Labor in the Twentieth Century* (New York, Academic Press, 1978), p. 30.

<sup>7</sup> U.S. Bureau of Labor, *Nineteenth Annual Report of the Commissioner of Labor: Wages and Hours of Labor* (Washington, U.S. Government Printing Office, 1905), p. 18.

<sup>8</sup> U.S. Bureau of Labor, *Twenty-third Annual Report of the Commissioner of Labor: Workmen's Insurance and Benefit Funds in the United States* (Washington, U.S. Government Printing Office, 1909), pp. 17-19.

<sup>9</sup> John M. Peterson and Ralph Gray, *Economic Development of the United States* (Homewood, IL, Richard D. Irwin, Inc., 1969), p. 357.

<sup>10</sup> Robert B. Reich, *The Work of Nations* (New York, Vintage Books, 1992), p. 39.

<sup>11</sup> Peterson and Gray, p. 358.

<sup>12</sup> Reich, p. 40.

<sup>13</sup> Dunlop and Galenson, p. 32.

<sup>14</sup> *Ibid.*, p. 29.

<sup>15</sup> *Ibid.*, p. 47.

<sup>16</sup> Joseph P. Goldberg and William T. Moye, *The First Hundred Years of the Bureau of Labor Statistics*, Bulletin 2235 (Bureau of Labor Statistics, September 1985), p. 71.

<sup>17</sup> H.M. Douthy, "A century of wage statistics: the BLS contribution," *Monthly Labor Review*, November 1984, p. 20.

<sup>18</sup> Goldberg and Moye, p. 71.

<sup>19</sup> *Ibid.*, p. 107.

<sup>20</sup> "The Work of the United States Bureau of Labor Statistics," *Monthly Labor Review*, December 1927, p. 1.

<sup>21</sup> Goldberg and Moye, p. 114.

<sup>22</sup> *Ibid.*, p. 120.

<sup>23</sup> *Ibid.*, p. 124.

<sup>24</sup> Douthy, p. 20.

<sup>25</sup> "Changes in Union Scale of Wages and Hours of Labor, 1913 to 1925," *Monthly Labor Review*, September 1925, pp. 54-76.

<sup>26</sup> Goldberg and Moye, p. 133.

<sup>27</sup> *Employee Benefits* (Washington, U.S. Department of Commerce, 1997), p. 41.

<sup>28</sup> "Workmen's Compensation Legislation as of July 1, 1926," *Monthly Labor Review*, March 1927, p. 55.

<sup>29</sup> Fatal injuries were not covered in Oklahoma where a constitutional barrier of compensation for death was held to exist.

<sup>30</sup> "Workmen's Compensation," p. 55.

<sup>31</sup> "Group Insurance Experience of Various Establishments," *Monthly Labor Review*, June 1927, pp. 76-86.

<sup>32</sup> A group insurance plan is a contract typically made with an employer and an insurance company to cover a group of employees. Premiums are typically based on the group's claim experience. Group insurance plans were first developed for life insurance and disability insurance.

<sup>33</sup> "Group Insurance," p. 76.

<sup>34</sup> *Ibid.*, pp. 78-79.

<sup>35</sup> *Ibid.*, pp. 80-81.

<sup>36</sup> *Ibid.*, p. 82.

<sup>37</sup> Dunlop and Galenson, p. 27.

<sup>38</sup> Peterson and Gray, p. 401.

<sup>39</sup> Dunlop and Galenson, p. 31.

<sup>40</sup> *Ibid.*, p. 79.

<sup>41</sup> Workers' compensation laws were enacted in all but four States—Florida, South Carolina, Arkansas, and Mississippi. See Price V. Fishback and Shawn E. Kantor, "The Adoption of Workers' Compensation in the United States, 1900-1930," Working Paper 5840 (Cambridge, MA, National Bureau of Economic Research, November 1996), p. 49.

<sup>42</sup> Ross M. Robertson, *History of the American Economy* (New York, Harcourt Brace Jovanovich, Inc., 1973), p. 676.

<sup>43</sup> *Ibid.*, p. 677.

<sup>44</sup> Fishback and Kantor, "A Prelude to the Welfare State," p. 32.

<sup>45</sup> Robertson, p. 677.

<sup>46</sup> "Historical Development," *Social Security Online* (Washington, U.S. Social Security Administration) on the Internet at [www.ssa.gov/history/brief.html](http://www.ssa.gov/history/brief.html) (visited June 24, 2001).

<sup>47</sup> Alvin Bauman, "Measuring employee compensation in U.S. industry," *Monthly Labor Review*, October 1970, p. 19.

<sup>48</sup> *Ibid.*, p. 19.

<sup>49</sup> Goldberg and Moye, p. 170.

<sup>50</sup> *Ibid.*, p. 160.

<sup>51</sup> Douthy, p. 20.

<sup>52</sup> Goldberg and Moye, p. 160.

<sup>53</sup> Douthy, p. 20.

<sup>54</sup> Frances Jones and Dorothy Smith, "Personnel Policies and Working Conditions in the Manufacture of Cigarettes and Tobacco," *Monthly Labor Review*, February 1937, pp. 319-40.

<sup>55</sup> *Ibid.*, p. 319.

<sup>56</sup> *Ibid.*, p. 320.

<sup>57</sup> Edward P. Sanford, "Wage rates and hours of labor in the building trades," *Monthly Labor Review*, August 1937, pp. 281-93.

<sup>58</sup> *Ibid.*, p. 284.

<sup>59</sup> Frances Jones and Dorothy Smith, "Extent of vacations with pay in industry, 1937," *Monthly Labor Review*, August 1938, pp. 269-74.

<sup>60</sup> Frances Jones and Dorothy Smith, "Characteristics of paid-vacation plans," *Monthly Labor Review*, December 1938, pp. 1225-38.

<sup>61</sup> *Ibid.*, p. 1235.

<sup>62</sup> *Ibid.*, p. 1274.

<sup>63</sup> *Ibid.*, p. 1225.