DATA SOURCES IN LIR
A look at data sources that can be used to study the compensation, unionization, and many aspects of the employment relationship.

DATA SETS

- National Compensation Survey
  - Wages
  - Benefits
  - Compensation Cost Trends
    - ECI
    - ECEC
- Current Population Survey
  - Unicon Research

DATA SOURCES

- Bureau of the Census
  - Economic Census
- Bureau of Labor Statistics
  - Employment, Hours and Earnings
  - Occupational Outlook Handbook
  - Consumer Price Index (CPI)
  - Producer Price Index (PPI)
  - Handbook of Methods
The National Compensation Survey (NCS) provides comprehensive measures of occupational earnings, compensation cost trends, benefit incidence, and detailed plan provisions. Detailed occupational earnings are available for metropolitan and non-metropolitan areas, broad geographic regions, and on a national basis. The index component of the NCS (ECI) measures changes in labor costs. Average hourly employer cost for employee compensation is presented in the ECEC.
(1) Wages

- Average hourly wages for up to 480 occupations in over 85 metropolitan and nonmetropolitan localities
- Weekly and annual earnings and hours for full-time workers
- Earnings by work level that permit wage comparisons across occupational groups
- Data presented at three levels: Localities, broad regions, and the Nation
- Workers are shown as a total (All workers) and broken out by Private industry and State and local government
- Wage data are shown by industry, occupational group, full-time and part-time status, union and nonunion status, establishment size, time and incentive status, and job level.

To Locate A Wage for a Given Occupation / Location / Work Level:
In the NCS web site, http://www.bls.gov/ncs/home.htm, hit “Wages (NCS)” under the heading of “Create Customized Tables (one screen)”. The following should appear:
Using this screen, we can select the occupation / location combination we are interested in. For example, let’s look at the wage of labor relations specialists in the Detroit area:

<table>
<thead>
<tr>
<th>Area</th>
<th>Occupation</th>
<th>Level</th>
<th>DataSource</th>
<th>Year</th>
<th>Period</th>
<th>Hourly Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detroit-Ann Arbor-Flint, MI</td>
<td>Personnel, training, and labor relations specialists</td>
<td>Overall</td>
<td>Published</td>
<td>1998</td>
<td>Mar</td>
<td>$24.07</td>
</tr>
<tr>
<td>Detroit-Ann Arbor-Flint, MI</td>
<td>Personnel, training, and labor relations specialists</td>
<td>Overall</td>
<td>Published</td>
<td>1998</td>
<td>Jul</td>
<td>$23.89</td>
</tr>
<tr>
<td>Detroit-Ann Arbor-Flint, MI</td>
<td>Personnel, training, and labor relations specialists</td>
<td>Overall</td>
<td>Published</td>
<td>1999</td>
<td>Aug</td>
<td>$24.24</td>
</tr>
<tr>
<td>Detroit-Ann Arbor-Flint, MI</td>
<td>Personnel, training, and labor relations specialists</td>
<td>Overall</td>
<td>Published</td>
<td>2000</td>
<td>Apr</td>
<td>$24.69</td>
</tr>
<tr>
<td>Detroit-Ann Arbor-Flint, MI</td>
<td>Personnel, training, and labor relations specialists</td>
<td>Overall</td>
<td>Published</td>
<td>2001</td>
<td>Apr</td>
<td>$21.91</td>
</tr>
<tr>
<td>Detroit-Ann Arbor-Flint, MI</td>
<td>Personnel, training, and labor relations specialists</td>
<td>Overall</td>
<td>Published</td>
<td>2002</td>
<td>Apr</td>
<td>$24.66</td>
</tr>
</tbody>
</table>
WORK LEVELS: Instead of just looking at the wages of an overall occupation, the NCS is ground-breaking in that it allows you to analyze the wages within an occupation according to work levels. Work levels measure the difficulty / importance of a job, as one can compare entry-level wages for an occupation and that of journeymen or supervisors.

Work levels take into account nine criteria: knowledge, supervision received, guidelines, complexity, scope and effect, personal contacts, purpose of contacts, physical demands, and work environment. To calculate the work level you are interested in, different point totals are allotted to each mark on the scale for each criteria.

To see an example, suppose we were interested in the wages of HR managers in the Chicago area (those fresh out of MSU LIR, e.g.). Off the top of our head, we do not know the necessary work level, so going back to our query screen from before, we can select “Get help choosing a Work Level”, which will kick us into the following screen:

From here, we can select the choices that best fit the job we are interested in, as our selections may look like the following:
Thus, according to our calculations, we have found that these HR manager positions are at Work Level 8. So, going “back” to our query screen, we select our occupation / location / work level combination and hit “Get Data”: 
What results is the following:

<table>
<thead>
<tr>
<th>Area</th>
<th>Occupation</th>
<th>Level</th>
<th>DataSource</th>
<th>Year</th>
<th>Period</th>
<th>Hourly Rate</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago-Gary-Kenosha, IL-IN-WI</td>
<td>Personnel and labor relations managers</td>
<td>Level 08</td>
<td>Modeled</td>
<td>2002</td>
<td>Jul</td>
<td>$27.38</td>
<td>F1=6;F2=2;F3=3; F4=3;F5=3;F6=2; F7=3;F8=1;F9=1</td>
</tr>
</tbody>
</table>

We could also look at the highest level of labor relations managers in the Chicago area:

<table>
<thead>
<tr>
<th>Area</th>
<th>Occupation</th>
<th>Level</th>
<th>DataSource</th>
<th>Year</th>
<th>Period</th>
<th>Hourly Rate</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago-Gary-Kenosha, IL-IN-WI</td>
<td>Personnel and labor relations managers</td>
<td>Level 13</td>
<td>Modeled</td>
<td>2002</td>
<td>Jul</td>
<td>$59.50</td>
<td>Typical Factors F1=8;F2=4;F3=4; F4=5;F5=5;F6=3; F7=3;F8=1;F9=1;</td>
</tr>
</tbody>
</table>

You can look at similar combinations for all 480 occupations.
(2) Benefits

The National Compensation Survey (NCS) covers the incidence and detailed provisions of selected employee benefit plans in small private establishments, medium and large private establishments, and state and local governments. The data are presented as the percent of employees who have access to or participate in certain benefits, or as average benefit provisions (for example, the average number of paid holidays provided to employees each year).

The NCS allows individuals to analyze benefit coverage across regions, within industries and occupations, private vs. public sector, union status, and other worker characteristics. The NCS studies the whole gamut of benefits, including child care, pensions, vacations, paid holidays, medical coverage, disability insurance, sick leave, survivor income, maternity leave, dental coverage, and dozens of other categories.

While there are countless numbers of possibilities to look at, here are some examples of data you can download from the NCS:

- Average Employee Contribution For Family Coverage Medical Care Benefits In Establishments With 1-99
- Incidence of Adoption Assistance Among Blue-Collar Occupations
- Incidence of Child Care Among Union Workers
- Average Life Insurance Based on Flat Dollar Amount
- Average Number of Paid Funeral Leave Days Per Occurrence
- Percent of Blue-Collar Occupations Participating In Defined Benefit Pension
To Locate Benefit Levels
In the NCS web site, http://www.bls.gov/ncs/home.htm, hit “Benefits” under the heading of “Create Customized Tables (one screen)”. The following should appear:
EXAMPLE: Suppose I was interested in finding the average union employee contribution for single-person medical care coverage. We can select the appropriate choice, select “Private Industry” (only available option), and then “Get Data”. We would get the following results:

RESULTS:

<table>
<thead>
<tr>
<th>Series Id:</th>
<th>EBUSELFAVEUN00AP (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title:</td>
<td>Average Union Employee Contribution For Single Coverage Medical Care Benefits</td>
</tr>
<tr>
<td>Type:</td>
<td>All Private Industry</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>48.65</td>
</tr>
<tr>
<td>2003</td>
<td>49.40</td>
</tr>
</tbody>
</table>

A : Average monthly premium
EXAMPLE: Suppose we wanted to determine the average number of vacation days awarded to employees with five years of seniority within a state agency.

RESULTS:
(3) Compensation Cost Trends:
- Employment Cost Index (ECI)
- Employer Costs for Employee Compensation (ECEC)

**Employment Cost Index (ECI):** The ECI is a quarterly measure of changes in labor costs. It is one of the principal economic indicators used by the Federal Reserve Bank. It is a time-series statistic that allows you to study wage movements at the industry level over time.

The following are some of the main features of the data:
- Shows changes in wages and salaries and benefit costs, as well as changes in total compensation
- Presents data as a total for all workers and separately for private industry and for State and local government workers
- Reports compensation changes by industry, occupational group, union and nonunion status, region, and metropolitan/nonmetropolitan status
- Provides seasonally adjusted and unadjusted data
**Employer Costs for Employee Compensation (ECEC):** The ECEC is an annual survey that presents the employers' average hourly cost for total compensation and its components. With this data set, you can explore the average cost per hour of specific benefits, and analyze the percentage that particular benefits contribute to total compensation. You can explore the cost trends of dozens of benefits within scores of occupations.

**Possible Trends Seen by the ECEC**
- Vacation Costs as a Percent of Total Compensation in the manufacturing industry
- Pension Costs as “Cost Per Hour Worked” for blue-collar occupations
- Workers’ Compensation Costs as a Percent of Total Compensation in Union firms.

**To Locate Employer Compensation Costs Trends**
In the NCS web site, http://www.bls.gov/ncs/home.htm, hit “Employer Costs for Employee Compensation (ECEC)” under the heading of “Create Customized Tables (one screen)”. The following should appear:
EXAMPLE: Suppose we wanted to look at the trends of health insurance costs as a factor of compensation packages for manufacturing workers. We can make the appropriate selections and find the following:

RESULTS:

<table>
<thead>
<tr>
<th>Year</th>
<th>Period</th>
<th>Cost of compensation (Cost per hour worked)</th>
<th>Percent of total compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>Annual</td>
<td>1.54</td>
<td>6.9</td>
</tr>
<tr>
<td>1999</td>
<td>Annual</td>
<td>1.58</td>
<td>6.9</td>
</tr>
<tr>
<td>2000</td>
<td>Annual</td>
<td>1.69</td>
<td>7.2</td>
</tr>
<tr>
<td>2001</td>
<td>Annual</td>
<td>1.75</td>
<td>7.2</td>
</tr>
<tr>
<td>2002</td>
<td>Qtr1</td>
<td>1.92</td>
<td>7.6</td>
</tr>
<tr>
<td>2002</td>
<td>Qtr2</td>
<td>1.94</td>
<td>7.7</td>
</tr>
<tr>
<td>2002</td>
<td>Qtr3</td>
<td>1.97</td>
<td>7.8</td>
</tr>
<tr>
<td>2002</td>
<td>Qtr4</td>
<td>1.99</td>
<td>7.8</td>
</tr>
<tr>
<td>2003</td>
<td>Qtr1</td>
<td>2.08</td>
<td>8.0</td>
</tr>
<tr>
<td>2003</td>
<td>Qtr2</td>
<td>2.12</td>
<td>8.1</td>
</tr>
</tbody>
</table>
NCS Survey Methodology

The sample for the National Compensation Survey (NCS) (Wages, Benefits, Compensation Cost Trends -- Employment Cost Index (ECI) and Employment Costs for Employee Compensation (ECEC)) is selected using a three-stage design. The first stage involves the selection of areas. The NCS sample consists of 154 metropolitan and nonmetropolitan areas that represent the Nation's 326 metropolitan statistical areas and the remaining portions of the 50 States.

In the second stage, the sample of establishments is drawn by dividing the sample by industry and ownership. Each sample establishment is selected using a method of sampling called probability proportional to employment size. (See NCS: Occupational Wages in the United States, 2000 National Summary - Technical Note). Use of this technique means that the larger an establishment's employment, the greater its chance of selection.

The third stage of sampling is a probability sample of occupations within a sampled establishment. This step is performed by the field economist during an interview with the respondent using a method called Probability Selection of Occupations (PSO). During this process, the field economist obtains a complete list of employees with each selected employee representing a job within the establishment. As with establishment selection, the selection of a job is based on probability proportional to its size in the establishment. The greater the number of people working in a particular job, the greater the job's chance of selection. The field economist selects a certain number of sample occupations depending on the size of the establishment.

After job selection is complete, the field economist classifies each occupation under its corresponding major occupational group and occupational classification. Currently, NCS uses the Occupational Classification System Manual (OCSM) and the Census Occupation Index to classify occupations. These are based on the 1990 U.S. Census.
CURRENT POPULATION SURVEY
http://www.unicon.com/

What is the CPS?
The Current Population Survey (CPS), the source of many official Government statistics, is administered by the Bureau of the Census under the auspices of the Bureau of Labor Statistics (BLS). The CPS has been conducted for over 50 years. Currently, about 65,000 households are interviewed monthly, scientifically selected on the basis of area of residence to represent the nation as a whole, individual states, and other specified areas. Each household is interviewed once a month for four consecutive months one year, and again for the corresponding time period a year later, resulting in 8 total months in the survey. Each month, new households are added and old ones are dropped. Eight rotation groups (cohorts of households starting their interviews in the same month) are interviewed in any month.

The main purpose of the CPS is to collect information on the employment situation in the U.S. Comprehensive data are available on the labor force activity for the week prior to the survey, as well as employment status, occupation, and industry of adults (currently defined as 15 years of age and older). The survey is also used to collect demographic information, such as age, sex, race, marital status, veteran status, Hispanic origin, educational attainment, and family structure. Periodically, additional questions are included on such topics as health, education, income, and previous work experience.

The CPS sample attempts to represent the civilian noninstitutional population of the United States by using a probability sample to select housing units. The typical unit of observation is individuals within households; however, the March series also has family and household observations. Weights are supplied in the data files to expand the counts to nationally representative levels.

What is Unicon?
In order to decipher this GIGANTIC data file, Unicon Research has developed an on-line method for exploring and analyzing data from the CPS. With this software, one can create tables, graphs and even regression equations using the variables from the CPS. It should be noted that to fully explore the data set and extract the underlying data, one should order the software program released by the Census Bureau: “CPS Utilities”.
To Explore CPS Data for Free: Go to Unicon’s web site:

Follow these links:
1. CPS Utilities
2. Analyze and extract data online with CPS on Web
From here, you’ll have to register (for free). Then select “Outgoing Rotations”, fill in your username and password, and select “Enter”.

You’ll then be taken to the following screen:

You can select the variables at the top of the page, and select options to make (1) tables, (2) graphs or (3) regression outcomes.
EXAMPLE: Suppose we want to make a table, looking at the breakdown of employees within a particular occupation by race. We search the variables and find the appropriate measures we are interested in – “race” and “occmaj”, which classifies individuals within one of 13 major occupational groups. It should be noted that you should always “View Documentation” to see exactly what the variable measures, and whether it is correctly specified for your use. This is especially important when trying to use the regression feature of the Unicon web site. In order to create a table of employees in occupations by race, we enter the appropriate variables into the page, and select “Make Table”:
(1) Economic Census
http://www.census.gov/epcd/www/econ97.html

Every five years, the Bureau of the Census surveys millions of American businesses (those with at least one paid employee), reporting results by industry, state, and even local levels. Listed for all 50 states and the District of Columbia, the Economic Census details the number of establishments, amount of sales, annual payroll, and number of paid employees (among numerous other statistics) for each locale / industry combination. Note: The most current economic census is from 1997 – the 2002 results are still being tabulated.

POSSIBLE USES (only a partial list)

Gauge the competition
A manufacturer compared statistics for his company with industry-wide figures in census reports. He became concerned when he found that they achieved less value added per employee than the competition--represented by industry averages. Census figures helped him convince the company's Board of Directors to reduce administrative staff and take other measures to increase productivity and profitability.

Calculate market share
A restaurant supply wholesaler calculated that it had roughly an 11-percent market share--its own sales divided by state totals for similar businesses-- in its primary sales region in the northern mountain states. The wholesaler used that figure as a target when it expanded into Arizona and New Mexico.

Locate business markets
A diskette duplication service used the numbers of businesses by ZIP Code on CD-ROM to assess the completeness and coverage of its direct mail list of service and retail businesses. For industries where its coverage was poor, the business purchased commercial mailing lists or advertising space in appropriate trade periodicals.

Site location
A major food store chain uses retail census data and population figures to estimate potential weekly food store sales in the trade area for each of its stores. These estimates allow the company to calculate market share for each existing store, and to evaluate prospective sites for new stores.
EXAMPLE: While data can be analyzed by the state and industry level, it can also be viewed by ZIP Code. Clicking on the ZIP Code link on the Economic Census page, you can use the menus at the upper right to select the ZIP Code you wish to study. For example, suppose we wanted to study Haslett, Michigan (48840). By using the pulldown menus, we can retrieve the following information:

<table>
<thead>
<tr>
<th>NAICS code</th>
<th>Description</th>
<th>Establishments</th>
<th>Sales or receipts ($1,000)</th>
<th>Annual payroll ($1,000)</th>
<th>Payroll employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Mining (not published for ZIP Code)</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>22</td>
<td>Utilities (not published for ZIP Code)</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>31-33</td>
<td>Manufacturing</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>42</td>
<td>Wholesale trade (not published for ZIP Code)</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>44-45</td>
<td>Retail trade</td>
<td>23</td>
<td>25m-4999</td>
<td>2500-4999</td>
<td>250-4999</td>
</tr>
<tr>
<td>46-48</td>
<td>Transportation &amp; warehousing (not published for ZIP Code)</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>51</td>
<td>Information (not published for ZIP Code)</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>52</td>
<td>Finance &amp; insurance (not published for ZIP Code)</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>53</td>
<td>Real estate &amp; rental leasing (not published for ZIP Code)</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>54</td>
<td>Professional, scientific &amp; technical services</td>
<td>Taxable</td>
<td>21</td>
<td>5000-9999</td>
<td>2500-4999</td>
</tr>
<tr>
<td>55</td>
<td>Administrative &amp; support &amp; waste management (not published for ZIP Code)</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>56</td>
<td>Educational services</td>
<td>Taxable</td>
<td>3</td>
<td>250-4999</td>
<td>50-99</td>
</tr>
<tr>
<td>62</td>
<td>Health care &amp; social assistance</td>
<td>Taxable</td>
<td>20</td>
<td>5000-9999</td>
<td>2500-4999</td>
</tr>
<tr>
<td>71</td>
<td>Arts, entertainment &amp; recreation</td>
<td>Taxable</td>
<td>1</td>
<td>50-99</td>
<td>10-24</td>
</tr>
<tr>
<td>72</td>
<td>Accommodation &amp; food services</td>
<td>Taxable</td>
<td>17</td>
<td>5000-9999</td>
<td>1000-2499</td>
</tr>
<tr>
<td>81</td>
<td>Other services (except public administration)</td>
<td>Taxable</td>
<td>12</td>
<td>2500-4999</td>
<td>1000-2499</td>
</tr>
</tbody>
</table>

EXAMPLE: One can also download PDF files for each industry / state combination that is of interest. For example, to study the construction industry in Michigan, one can download the following file, a 44-page analysis of payroll and sales numbers.
BUREAU OF LABOR STATISTICS
http://www.bls.gov/

(1) Employment, Hours and Earnings (Current Employment Statistics)
http://www.bls.gov/ces/home.htm

The Current Employment Statistics (CES) survey of payroll records covers over 300,000 businesses on a monthly basis and provides detailed industry data on employment, hours, and earnings of workers on nonfarm payrolls for the Nation.

Data Available
- The data from the Current Employment Statistics survey include series for total employment, number of women employed, number of production or nonsupervisory workers, average hourly earnings, average weekly hours, average weekly earnings, and average weekly overtime hours in manufacturing industries.
- For all employees, women, and production or nonsupervisory workers, over 2,100 published monthly employment series are available. The series for all employees include over 1,150 industries at various levels of aggregation.
- Over 2,600 published monthly series for production workers' average weekly earnings, average hourly earnings, average weekly hours, and, in manufacturing, average weekly overtime hours are available. Hours and earnings data are available for about 850 industries.
- Most employment series begin in 1990, although employment by industry supersector is available since 1939.
- For industry supersectors and major groups, about 210 series of seasonally adjusted data are available.
- Over 200 special derivative series such as indexes and constant dollar series are also available.

Coverage
- Payroll employment in nonagricultural industries.
- Private sector hours and earnings: Production workers for natural resources and mining and manufacturing, construction workers for construction, and nonsupervisory workers in service-providing industries.

Source of Data
- Current Employment Statistics Program, a Federal-State cooperative program; sample based on over 400,000 business establishments.

Uses
- The first economic indicator of current economic trends each month, together with the unemployment rate.
- Health of the economy (employment).
- Earnings trends and wage-push inflation (average hourly earnings).
- Short-term fluctuations in demand (average weekly hours).
- Input into other major economic indicators:
- Personal Income (aggregate earnings).
LIR 832 - LIR Data Sources

- Industrial Production (aggregate hours in manufacturing, mining, and public utilities).
- Index of Leading Economic Indicators (average weekly hours in manufacturing).
- Index of Coincident Indicators (employment)
- Productivity measures (aggregate hours).
To Locate Employment, Hours, Earnings Tables
In the CES web site, http://www.bls.gov/ces/home.htm, hit “Create Customized Tables (one screen)”. The following should appear:
EXAMPLE: Suppose you wanted to know the average hours worked for production workers in the automobile manufacturing industry. You would select
(1) “Average Weekly Hours of Production Workers”
(2) “Manufacturing”
(3) “Automobiles and Light Trucks”

RESULTS:

<table>
<thead>
<tr>
<th>Year</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>40.9</td>
<td>42.0</td>
<td>43.0</td>
<td>42.6</td>
<td>44.2</td>
<td>44.0</td>
<td>41.8</td>
<td>43.5</td>
<td>45.0</td>
<td>45.7</td>
<td>46.0</td>
<td>47.1</td>
<td>43.8</td>
</tr>
<tr>
<td>1994</td>
<td>44.7</td>
<td>46.4</td>
<td>47.1</td>
<td>46.8</td>
<td>46.7</td>
<td>46.1</td>
<td>44.7</td>
<td>46.5</td>
<td>47.9</td>
<td>47.0</td>
<td>47.2</td>
<td>47.6</td>
<td>46.6</td>
</tr>
<tr>
<td>1995</td>
<td>45.3</td>
<td>46.6</td>
<td>46.8</td>
<td>44.0</td>
<td>45.8</td>
<td>45.2</td>
<td>44.4</td>
<td>44.5</td>
<td>46.5</td>
<td>45.3</td>
<td>45.7</td>
<td>45.4</td>
<td>45.5</td>
</tr>
<tr>
<td>1996</td>
<td>43.0</td>
<td>44.0</td>
<td>41.6</td>
<td>45.7</td>
<td>46.3</td>
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<td>44.0</td>
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The Occupational Outlook Handbook is a nationally recognized source of career information, designed to provide valuable assistance to individuals making decisions about their future work lives. Revised every two years, the Handbook describes what workers do on the job, working conditions, the training and education needed, earnings, and expected job prospects in a wide range of occupations. The OOH also provides a listing of employment projections from the current year to the year 2010.

To use this feature, click on one of the 11 industry links to the right of the page, which outline a number of occupations within each industry.
EXAMPLE: Suppose I wanted to know the job outlook, earnings, training required, and the nature of the work for HR directors. On the OOH entry screen, I would select the “Management” link, followed by the link “Human resources, training, and labor relations managers and specialists”. From here, you would see:

Under this heading, you can read about eight characteristics of the occupation:

1. Nature of the Work
2. Working Conditions
3. Employment
4. Training, Other Qualifications, and Advancement
5. Job Outlook
6. Earnings
7. Related Occupations
8. Sources of Additional Information
(3) Consumer Price Index (CPI)
http://www.bls.gov/cpi/home.htm

The Consumer Price Indexes (CPI) program produces monthly data on changes in the prices paid by urban consumers for a representative basket of goods and services.

**Data available**
- Price indexes are available for the U.S., the four Census regions, size of city, cross-classifications of regions and size-classes, and for 26 local areas. Indexes are available for major groups of consumer expenditures (food and beverages, housing, apparel, transportation, medical care, recreation, education, and communications, and other goods and services), for items within each group, and for special categories, such as services.
- Monthly indexes are available for the U.S., the four Census regions, and some local areas. More detailed item indexes are available for the U.S. than for regions and local areas.
- Indexes are available for two population groups: a CPI for All Urban Consumers (CPI-U) which covers approximately 87 percent of the total population and a CPI for Urban Wage Earners and Clerical Workers (CPI-W) which covers 32 percent of the population.

**Coverage**
- The CPI represents changes in prices of all goods and services purchased for consumption by urban households. User fees (water and sewer service) and sales and excise taxes paid by the consumer are also included. Income taxes and investment items are not included.
- The CPI-U includes expenditures by urban wage earners and clerical workers, professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, retirees and others not in the labor force. The CPI-W includes only expenditures by those in hourly wage earning or clerical jobs.

**Sources of data**
- Prices for the goods and services used to calculate the CPI are collected in 87 urban areas throughout the country and from about 23,000 retail and service establishments. Data on rents are collected from about 50,000 landlords or tenants.

**Uses**
- As an economic indicator. As the most widely used measure of inflation, the CPI is an indicator of the effectiveness of government policy. In addition, business executives, labor leaders and other private citizens use the index as a guide in making economic decisions.
- As a means for adjusting income payments. Over 2 million workers are covered by collective bargaining agreements which tie wages to the CPI. The index affects the income of almost 80 million people as a result of statutory action: 47.8 million Social Security beneficiaries, about 4.1 million military and Federal Civil Service retirees and survivors, and about 22.4 million food stamp recipients. Changes in the CPI also affect the cost of lunches for the 26.7 million children who eat lunch at school. Some private firms and individuals use the CPI to keep rents, royalties, alimony payments and child support payments in line with changing prices. Since 1985, the CPI has been used to adjust the Federal income tax structure to prevent inflation-induced increases in taxes.
(4) **Producer Price Index (PPI)**
http://www.bls.gov/ppi/home.htm

The Producer Price Index (PPI) program measures the average change over time in the selling prices received by domestic producers for their output. The prices included in the PPI are from the first commercial transaction for many products and some services.

**Data**
- The Producer Price Index (PPI) is a family of indexes that measures the average change over time in selling prices received by domestic producers of goods and services. PPIs measure price change from the perspective of the seller. This contrasts with other measures, such as the Consumer Price Index (CPI), that measure price change from the purchaser's perspective. Sellers' and purchasers' prices may differ due to government subsidies, sales and excise taxes, and distribution costs.
- There are three main PPI publication structures:
  - **Industry-based.** The PPI publishes over 500 industry price indexes in combination with over 10,000 specific product line and product category sub-indexes.
  - **Commodity-based.** The PPI publishes over 3,200 commodity price indexes organized by type of product and end use.
  - **Stage-of-processing based.** The PPI publishes aggregate price indexes organized by commodity-based processing stage. The three stages of processing include Finished Goods; Intermediate Materials, Supplies, and Components; and Crude Materials for Further Processing.

**Coverage**
- The PPI tracks price change for practically the entire output of domestic goods-producing sectors: agriculture, forestry, fisheries, mining, scrap, and manufacturing.
- The PPI tracks price change for an ever-growing portion of the non-goods producing sectors of the economy. New PPIs are gradually being introduced for the products of industries in the transportation, utilities, finance, business services, health, legal, and professional services sectors of the economy.

**Data source**
- The PPI sample includes approximately 25,000 establishments providing close to 100,000 price quotations per month.
- Participating establishments report price data primarily through the mail.
- Goods and services included in the PPI are weighted by value-of-shipments data contained in the 1997 economic censuses.

**Uses**
- **Contract escalation.** PPI data are commonly used in escalating purchase and sales contracts. These contracts typically specify dollar amounts to be paid at some point in the future. It is often desirable to include an escalation clause that accounts for changes in input prices. For example, a long-term contract for bread may be escalated for changes in wheat prices by applying the percent change in the PPI for wheat to the contracted price for bread. (See *Escalation and Producer Price Indexes: A Guide for Contracting Parties*, BLS Report 807, September 1991.)
- **Indicator of overall price movement at the producer level.** PPIs capture price movement prior to the retail level. Therefore, they may foreshadow subsequent price changes for business and consumers. The President, Congress, and the Federal Reserve employ these data in formulating fiscal and monetary policies.
- **Measure of price movement for particular industries and products.**
- **Comparison of input and output costs.**
- **Comparison of industry-based price data to other industry-oriented economic time series.**
- **LIFO (i.e., last-in, first-out) inventory valuation.**
(5) Handbook of Methods
http://www.bls.gov/opub/hom/home.htm

The BLS Handbook of Methods presents detailed explanations of how the Bureau of Labor Statistics obtains and prepares the economic data it publishes. BLS statistics are used for many purposes, and sometimes data well suited to one purpose may have limitations for another. This edition of the Handbook, like its many predecessors, aims to provide users of BLS data with the most current information necessary to evaluate the suitability of the statistics for their needs.

Chapters for each major Bureau program give a brief account of the program’s origin and development and then follow with comprehensive information on concepts and definitions, sources of data and methods of collection, statistical procedures, where the data are published, and their uses and limitations. Sources of additional technical information are given at the end of most chapters.