

# Package ‘epidata’

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**Type** Package

**Title** Tools to Retrieve Economic Policy Institute Data Library  
Extracts

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**Description** The Economic Policy Institute (<<https://www.epi.org/>>) provides researchers, media, and the public with easily accessible, up-to-date, and comprehensive historical data on the American labor force. It is compiled from Economic Policy Institute analysis of government data sources. Use it to research wages, inequality, and other economic indicators over time and among demographic groups. Data is usually updated monthly.

**URL** <https://gitlab.com/hrbrmstr/epidata>

**BugReports** <https://github.com/hrbrmstr/epidata/issues>

**License** AGPL

**Depends** R (>= 3.6.0)

**Imports** purrr, httr, jsonlite, dplyr, rvest, xml2, tidyr, readr,  
stringi, tinytest

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`get_annual_wages_and_work_hours`

*Retrieve CPS ASEC Annual Wages and Work Hours*

---

### **Description**

Annual, weekly, and hourly wages and work hours show the average wages and work hours of wage and salary workers using data from the CPS ASEC (also known as the March CPS). Note that this data is not directly comparable to the CPS ORG data in median/average hourly wage.

### **Usage**

```
get_annual_wages_and_work_hours()
```

### **Value**

tbl\_df  
data frame

### **Note**

CPS ASEC | Murphy and Welch (1989)

## References

[Economic Policy Institute Data Library](#)

## Examples

```
get_annual_wages_and_work_hours()
```

---

```
get_annual_wages_by_wage_group
```

*Annual wages by wage group*

---

## Description

Return the average annual salaries for select wage groups, with particular focus on the highest wage earners. Note that this data is not directly comparable to wage deciles/percentiles.

## Usage

```
get_annual_wages_by_wage_group()
```

## Details

Wages are in 2017 dollars. Population sample: All workers.

The average annual wages by wage group are taken from a 2010 article by Wojciech Kopczuk, Emmanuel Saez, and Jae Song. To extend this series, data for 2006 through 2017 are extrapolated from 2004 data using changes in wage shares computed from Social Security Administration wage statistics. We employ the midpoint of the bracket to compute total wage income in each bracket and sum all brackets. We then use interpolation to derive percentile cutoffs building from the bottom up to obtain the 0–90th percentile bracket and then estimate the remaining categories. This allows us to estimate the wage shares for upper wage groups. We use these wage shares computed for 2004 and later years to extend the Kopczuk, Saez, and Song series by adding the changes in share between 2004 and the relevant year to their series. To obtain absolute wage trends we use the SSA data on the total wage pool and employment and compute the real wage per worker (based on their share of wages and employment) in the different groups in 2017 dollars. For a detailed explanation, see the methodology for annual wages and hours.

## Value

tbl\_df with data filtered by the selected criteria.  
data frame

## Note

Data source: SSA | Kopczuk, Saez, and Song (2010)

## References

[Economic Policy Institute Data Library](#)

## Examples

```
if (not_dos()) get_annual_wages_by_wage_group()
```

---

```
get_black_white_wage_gap
```

*Retrieve the percent by which hourly wages of black workers are less than hourly wages of white workers*

---

## Description

The black-white wage gap is the percent by which hourly wages of black workers are less than hourly wages of white workers. It is also often expressed as a wage ratio (black workers' share of white workers' wages) by subtracting the gap from 100 percent.

## Usage

```
get_black_white_wage_gap(by = NULL)
```

## Arguments

by                    NULL or g for a partition by gender

## Details

- A median black-white wage gap of 26.2 percent means that a typical black worker is paid 26.2 percent less per hour than a typical white worker.
- An average black-white wage gap of 26.6 percent means that on average black workers are paid 26.6 percent less per hour than white workers.
- A regression-based black-white wage gap of 15.2 percent means that on average black workers are paid 15.2 percent less per hour than white workers, all else held equal (controlling for gender, race and ethnicity, education, experience, and geographic location).

## Value

tbl\_df with data filtered by the selected criteria.

## References

[Economic Policy Institute Data Library](#)

## Examples

```
if (not_dos()) get_black_white_wage_gap()
```

```
if (not_dos()) get_black_white_wage_gap("g")
```

---

`get_college_wage_premium`

*Retrieve the percent by which hourly wages of college graduates exceed those of otherwise equivalent high school graduates*

---

**Description**

A regression-based college wage premium of 56.1 percent means that on average workers with a college degree are paid 56.1 percent more per hour than workers whose highest education credential is a high school diploma, all else held equal (controlling for gender, race and ethnicity, education, experience, and geographic location).

**Usage**

```
get_college_wage_premium(by = NULL)
```

**Arguments**

`by` NULL or `g` for a partition by gender

**Value**

`tbl_df` with data filtered by the selected criteria.

**References**

[Economic Policy Institute Data Library](#)

**Examples**

```
if (not_dos()) get_college_wage_premium()

if (not_dos()) get_college_wage_premium("g")
```

---

`get_compensation_wages_and_benefits`

*Compensation, wages, and benefits*

---

**Description**

Return the nonwage payments, referred to as fringe benefits, and wages. Compensation includes employer payments for health insurance, pensions, and payroll taxes (primarily payments toward Social Security and unemployment insurance).

**Usage**

```
get_compensation_wages_and_benefits()
```

**Details**

Wages are in 2016 dollars. Wage and salary workers (NIPA) | Private-sector workers (ECEC)

**Value**

tbl\_df with data filtered by the selected criteria.  
data frame

**Note**

Data source: NIPA | ECEC

**References**

[Economic Policy Institute Data Library](#)

**Examples**

```
if (not_dos()) get_compensation_wages_and_benefits()
```

---

```
get_employment_to_population_ratio
```

*Retrieve the share of the civilian noninstitutional population that is employed*

---

**Description**

Retrieve the share of the civilian noninstitutional population that is employed

**Usage**

```
get_employment_to_population_ratio(by = NULL)
```

**Arguments**

by NULL or character string with any combination of g (Gender), r (Race), a (Age), e (Education). i.e. if you want to retrieve unemployment data by gender, race and education, you would set this parameter to "gre".

**Value**

tbl\_df with data filtered by the selected criteria.  
data frame

**References**

[Economic Policy Institute Data Library](#)

**Examples**

```
if (not_dos()) get_employment_to_population_ratio()

if (not_dos()) get_employment_to_population_ratio("r")

if (not_dos()) get_employment_to_population_ratio("grae")
```

---

get_gender_wage_gap	<i>Retrieve the percent by which hourly wages of female workers are less than hourly wages of male workers</i>
---------------------	--

---

**Description**

The gender wage gap is the percent by which hourly wages of female workers are less than hourly wages of male workers. It is also often expressed as a wage ratio (women's share of men's wages) by subtracting the gap from 100 percent.

**Usage**

```
get_gender_wage_gap(by = NULL)
```

**Arguments**

by                    NULL or r for a partition by race

**Details**

- A median gender wage gap of 17.3 percent means that a typical woman is paid 17.3 percent less per hour than a typical man.
- An average gender wage gap of 19.7 percent means that on average women are paid 19.7 percent less per hour than men.
- A regression-based gender wage gap of 21.7 percent means that on average women are paid 21.7 percent less per hour than men, all else held equal (controlling for gender, race and ethnicity, education, experience, and geographic location).

**Value**

tbl\_df with data filtered by the selected criteria.

**References**

[Economic Policy Institute Data Library](#)

**Examples**

```
if (not_dos()) get_gender_wage_gap()

if (not_dos())
  get_gender_wage_gap("r")
```

---

`get_health_insurance_coverage`*Retrieve Health Insurance Coverage*

---

**Description**

Employer-sponsored health insurance (ESI) coverage shows the share of workers who received health insurance from their own job for which their employer paid for at least some of their health insurance coverage.

**Usage**

```
get_health_insurance_coverage(by = NULL)
```

**Arguments**

`by` NULL or character string with any combination of `g` (Gender), `r` (Race), `e` (Education), `d` (Percentile), `l` (Entry-level) i.e. if you want to retrieve unemployment data by gender and race, you would set this parameter to "gr".

**Details**

Population sample: Private-sector workers age 18–64 & at least 20 hours/week and 26 weeks/year

**Value**

`tbl_df` with data filtered by the selected criteria.  
data frame

**Note**

Data source: CPS ASEC

**References**

[Economic Policy Institute Data Library](#)

**Examples**

```
if (not_dos()) get_health_insurance_coverage()
if (not_dos()) get_health_insurance_coverage("r")
if (not_dos()) get_health_insurance_coverage("gr")
```



---

`get_hispanic_white_wage_gap`

*Retrieve the percent by which hourly wages of Hispanic workers are less than hourly wages of white workers*

---

## Description

The Hispanic-white wage gap is the percent by which hourly wages of Hispanic workers are less than hourly wages of white workers. It is also often expressed as a wage ratio (Hispanic workers' share of white workers' wages) by subtracting the gap from 100 percent.

## Usage

```
get_hispanic_white_wage_gap(by = NULL)
```

## Arguments

`by` NULL or `g` for a partition by gender

## Details

- A median Hispanic-white wage gap of 29.6 percent means that a typical Hispanic worker is paid 29.6 percent less per hour than a typical white worker.
- An average Hispanic-white wage gap of 30.1 percent means that on average Hispanic workers are paid 30.1 percent less per hour than white workers.
- A regression-based Hispanic-white wage gap of 11.1 percent means that on average Hispanic workers are paid 11.1 percent less per hour than white workers, all else held equal (controlling for gender, race and ethnicity, education, experience, and geographic location).

## Value

`tbl_df` with data filtered by the selected criteria.

## References

[Economic Policy Institute Data Library](#)

## Examples

```
if (not_dos()) get_hispanic_white_wage_gap()

if (not_dos()) get_hispanic_white_wage_gap("g")
```

---

get\_labor\_force\_participation\_rate

*Retrieve the share of the civilian noninstitutional population that is in the labor force*

---

**Description**

(i.e., working or looking for work)

**Usage**

```
get_labor_force_participation_rate(by = NULL)
```

**Arguments**

**by** NULL or character string with any combination of g (Gender), r (Race), a (Age), e (Education). i.e. if you want to retrieve unemployment data by gender, race and education, you would set this parameter to "gre".

**Value**

tbl\_df with data filtered by the selected criteria.

**References**

[Economic Policy Institute Data Library](#)

**Examples**

```
get_labor_force_participation_rate()
get_labor_force_participation_rate("r")
get_labor_force_participation_rate("grae")
```

---

get\_long\_term\_unemployment

*Retrieve the share of the labor force that has been unemployed for six months or longer*

---

**Description**

Retrieve the share of the labor force that has been unemployed for six months or longer

**Usage**

```
get_long_term_unemployment(by = NULL)
```

**Arguments**

by NULL or character string with any combination of g (Gender), r (Race), a (Age), e (Education). i.e. if you want to retrieve unemployment data by gender, race and education, you would set this parameter to "gre".

**Value**

tbl\_df with data filtered by the selected criteria.

**References**

[Economic Policy Institute Data Library](#)

**Examples**

```
get_long_term_unemployment()  
get_long_term_unemployment("r")  
get_long_term_unemployment("grae")
```

---

get\_median\_and\_mean\_wages

*Retrieve the hourly wage in the middle of the wage distribution*

---

**Description**

The median wage is the hourly wage in the middle of the wage distribution; 50 percent of wage earners earn less and 50 percent earn more. The average wage is the arithmetic mean of hourly wages; or, the sum of all workers' hourly wages divided by the number of workers.

**Usage**

```
get_median_and_mean_wages(by = NULL)
```

**Arguments**

by NULL or character string with any combination of g (Gender), r (Race), e (Education), d (Percentile), l (Entry-level) i.e. if you want to wage data by gender and race, you would set this parameter to "gr".

**Value**

tbl\_df with data filtered by the selected criteria.

**References**

[Economic Policy Institute Data Library](#)

**Examples**

```
get_median_and_mean_wages()  
get_median_and_mean_wages("r")  
get_median_and_mean_wages("gr")
```

---

<code>get_minimum_wage</code>	<i>Minimum wage</i>
-------------------------------	---------------------

---

**Description**

Return the hourly minimum wage set by federal law. The real minimum wage is the federal hourly minimum wage adjusted for inflation.

**Usage**

```
get_minimum_wage()
```

**Details**

Wages are in 2016 dollars, excluding the nominal federal minimum wage. Share of average wages based on the average wages of production and nonsupervisory workers. For state minimum wages, see EPI's minimum wage tracker.

Population sample: Production and nonsupervisory workers (average wages)

**Value**

tbl\_df with data filtered by the selected criteria.  
data frame

**Note**

Data source: U.S. Department of Labor Wage and Hour Division | CES

**References**

[Economic Policy Institute Data Library](#)

**Examples**

```
if (not_dos()) get_minimum_wage()
```

---

`get_non_high_school_wage_penalty`

*Retrieve the percent by which hourly wages of workers without a high school diploma (or equivalent) are less than wages of otherwise equivalent workers who have graduated from high school*

---

### Description

A regression-based non-high school wage penalty of 21.8 percent means that on average workers without a high school diploma are paid 21.8 percent less per hour than workers with a high school diploma, all else held equal (controlling for gender, race and ethnicity, education, experience, and geographic location).

### Usage

```
get_non_high_school_wage_penalty(by = NULL)
```

### Arguments

by                    NULL or g for a partition by gender

### Value

tbl\_df with data filtered by the selected criteria.

### References

[Economic Policy Institute Data Library](#)

### Examples

```
## Not run:  
if (not_dos()) get_non_high_school_wage_penalty()  
  
if (not_dos()) get_non_high_school_wage_penalty("g")  
  
## End(Not run)
```

---

get\_pension\_coverage *Retrieve Pension Coverage*

---

### Description

Employer-provided pension coverage shows the share of workers included in an employer-provided plan for which the employer paid for at least some of their pension coverage.

### Usage

```
get_pension_coverage(by = NULL)
```

### Arguments

**by** NULL or character string with any combination of g (Gender), r (Race), e (Education), d (Percentile), l (Entry-level) i.e. if you want to retrieve pension data by gender and race, you would set this parameter to "gr".

### Details

Population sample: Private-sector workers age 18–64 & at least 20 hours/week and 26 weeks/year

### Value

tbl\_df with data filtered by the selected criteria.  
data frame

### Note

Data source: CPS ASEC

### References

[Economic Policy Institute Data Library](#)

### Examples

```
if (not_dos()) get_health_insurance_coverage()
if (not_dos()) get_health_insurance_coverage("r")
if (not_dos()) get_health_insurance_coverage("gr")
```

---

`get_poverty_level_wages`

*Poverty-level wages*

---

### **Description**

Return the share of workers earning equal to or less than the poverty-level wage, or the hourly wage that a full-time, year-round worker must earn to sustain a family of four with two children at the official poverty threshold.

### **Usage**

```
get_poverty_level_wages(by = NULL)
```

### **Arguments**

`by` NULL or character string with any combination of `g` (Gender) or `r` (Race), i.e. if you want to retrieve unemployment data by gender and race, you would set this parameter to "gr".

### **Details**

Population sample: Wage and salary workers age 18–64. Data source: CPS ORG | Census Bureau (poverty threshold)

### **Value**

`tbl_df` with data filtered by the selected criteria.  
data frame

### **References**

[Economic Policy Institute Data Library](#)

### **Examples**

```
if (not_dos()) get_poverty_level_wages()

if (not_dos()) get_poverty_level_wages("r")

if (not_dos()) get_poverty_level_wages("gr")
```

---

`get_productivity_and_hourly_compensation`*Retrieve Productivity and hourly compensation*

---

**Description**

Productivity is how much workers produce per hour, or the growth of output of goods and services minus depreciation per hour worked. Compensation is made up of both nonwage payments and wages.

**Usage**

```
get_productivity_and_hourly_compensation(by = NULL)
```

**Arguments**

`by` NULL or character string of `g` (Gender)

**Details**

Wages are in 2015 dollars. Median compensation is calculated using hourly wage medians from the CPS ORG and compensation from NIPA.

Population sample: All workers & Production and nonsupervisory workers

**Value**

`tbl_df` with data filtered by the selected criteria.

data frame

**Note**

Data source: NIPA (compensation) | BLS Productivity Data

**References**

[Economic Policy Institute Data Library](#)

**Examples**

```
if (not_dos()) get_productivity_and_hourly_compensation()
```

```
if (not_dos()) get_productivity_and_hourly_compensation("g")
```



---

get\_underemployment     *Retrieve the share of the labor force that is "underemployed"*

---

### Description

Underemployment is the share of the labor force that either 1) is unemployed, 2) is working part time but wants and is available to work full time (an "involuntary" part timer), or 3) wants and is available to work and has looked for work in the last year but has given up actively seeking work in the last four weeks ("marginally attached" worker).

### Usage

```
get_underemployment(by = NULL)
```

### Arguments

by                      NULL or character string with any combination of g (Gender), r (Race), a (Age), e (Education). i.e. if you want to retrieve unemployment data by gender, race and education, you would set this parameter to "gre".

### Value

tbl\_df with data filtered by the selected criteria.

### References

[Economic Policy Institute Data Library](#)

### Examples

```
get_underemployment()  
get_underemployment("r")  
get_underemployment("grae")
```

---

get\_unemployment     *Retrieve the share of the labor force without a job*

---

### Description

Retrieve the share of the labor force without a job

### Usage

```
get_unemployment(by = NULL)
```

**Arguments**

`by` NULL or character string with any combination of `g` (Gender), `r` (Race), `a` (Age), `e` (Education). i.e. if you want to retrieve unemployment data by gender, race and education, you would set this parameter to "gre".

**Value**

`tbl_df` with data filtered by the selected criteria.

**Note**

See `get_unemployment_by_state()` for information on retrieving unemployment by state+race.

**References**

[Economic Policy Institute Data Library](#)

**Examples**

```
get_unemployment()
```

```
get_unemployment("r")
```

```
get_unemployment("grae")
```

---

```
get_unemployment_by_state
```

*Retrieve the share of the labor force without a job (by state)*

---

**Description**

Retrieve the share of the labor force without a job (by state)

**Usage**

```
get_unemployment_by_state(by = NULL)
```

**Arguments**

`by` NULL or `r` for a partition by race.

**Value**

`tbl_df` with data filtered by the selected criteria.

**Note**

See `get_unemployment()` for other unemployment extracts..

## References

[Economic Policy Institute Data Library](#)

## Examples

```
get_unemployment_by_state()
```

```
get_unemployment_by_state("r")
```

---

<code>get_union_coverage</code>	<i>Retreive Union Coverage</i>
---------------------------------	--------------------------------

---

## Description

The union coverage rate shows the percentage of the workforce covered by a collective bargaining agreement.

## Usage

```
get_union_coverage()
```

## Value

`tbl_df`

data frame

## Note

Data source: CPS ORG | Hirsch and Macpherson (2003)

## References

[Economic Policy Institute Data Library](#)

## Examples

```
if (interactive()) get_union_coverage()
```

---

`get_wages_by_education`

*Retrieve the average hourly wages of workers disaggregated by the highest level of education attained*

---

### Description

Wages by education are the average hourly wages of workers disaggregated by the highest level of education attained. Employment shares provide the distribution of educational attainment for workers of each gender, racial, and ethnic group as a share of total employed for each group.

### Usage

```
get_wages_by_education(by = NULL)
```

### Arguments

`by` NULL or character string with any combination of `g` (Gender) or `r` (Race), i.e. if you want to retrieve unemployment data by gender and race, you would set this parameter to "gr".

### Value

`tbl_df` with data filtered by the selected criteria.

### References

[Economic Policy Institute Data Library](#)

### Examples

```
get_wages_by_education()
```

```
get_wages_by_education("r")
```

```
get_wages_by_education("gr")
```

---

`get_wages_by_percentile`

*Retrieve wages at ten distinct points in the wage distribution*

---

### Description

Wage percentiles are wages at ten distinct points in the wage distribution: deciles and the 95th percentile. The 95–50 and 50–10 wage ratios show how much greater wages are at the top than the middle, and at the middle than the bottom, respectively.

**Usage**

```
get_wages_by_percentile(by = NULL)
```

**Arguments**

**by** NULL or character string with any combination of g (Gender) or r (Race), i.e. if you want to retrieve unemployment data by gender and race, you would set this parameter to "gr".

**Value**

tbl\_df with data filtered by the selected criteria.  
data frame

**References**

[Economic Policy Institute Data Library](#)

**Examples**

```
get_wages_by_percentile()  
get_wages_by_percentile("r")  
get_wages_by_percentile("gr")
```

---

get\_wage\_decomposition

*Retrieve Wage Decomposition*

---

**Description**

Wage inequality data shows the overall wage inequality and the within-group and between-group wage inequality over time. These measures allow an examination of how much of the change in overall wage inequality in particular periods was due to changes in within-group and between-group wage inequality.

**Usage**

```
get_wage_decomposition(by = NULL)
```

**Arguments**

**by** NULL or character string of g (Gender)

**Details**

Population sample: Wage and salary workers age 18–64

**Value**

tbl\_df with data filtered by the selected criteria.  
data frame

**Note**

Data source: CPS ORG

**References**

[Economic Policy Institute Data Library](#)

**Examples**

```
get_wages_by_percentile()
```

```
get_wages_by_percentile("g")
```

---

not\_dos

*Not DoS'ing EPI/Cloudflare*

---

**Description**

The EPI site/API is protected by Cloudflare. CF thinks CRAN is DoS'ing it when it runs examples and tests. This function is being used to prevent tests and examples from failing on CRAN.

**Usage**

```
not_dos()
```

**Value**

logical

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