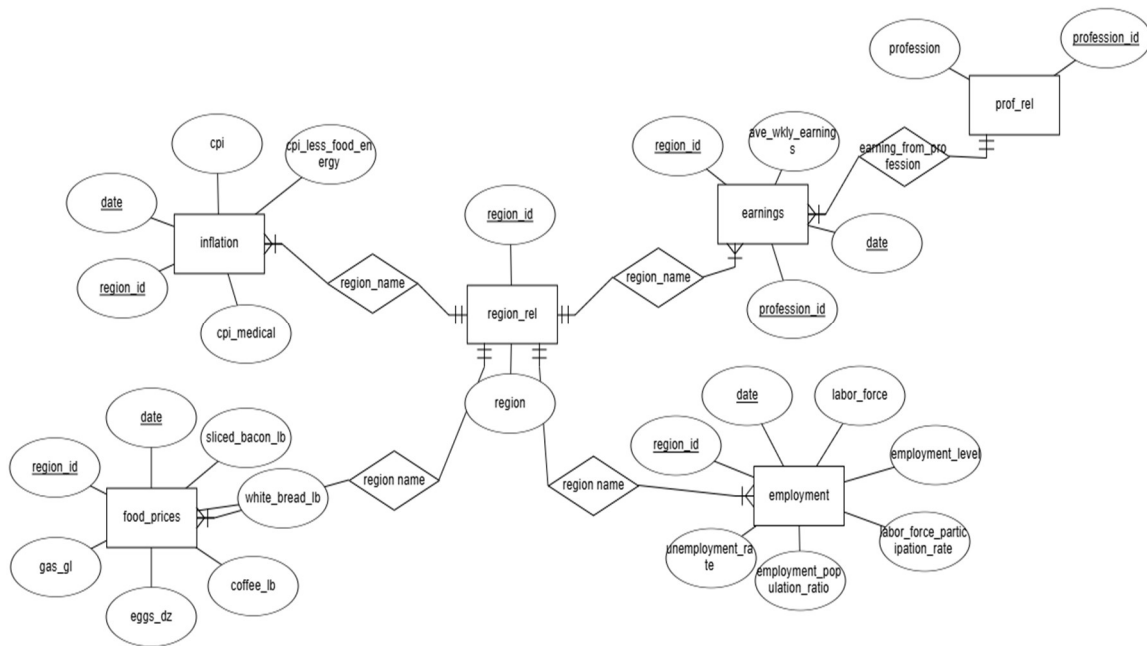


## Data Source

- Federal Reserve Bank of St.louis: <https://fred.stlouisfed.org/>
- U.S. Bureau of Labor Statistis: <https://www.bls.gov/data/>

## ER Diagram



- **prof\_rel**(profession\_id, profession)
- **region\_rel**(region\_id, region)
- **inflation**(date, region\_id, cpi, cpi\_less\_food\_energy, cpi\_medical)
  - region\_id is a foreign key to **region\_rel**.region\_id
- **food\_prices**(date, region\_id, sliced\_bacon\_lb, white\_bread\_lb, coffee\_lb, eggs\_dz, gas\_gl)
  - region\_id is a foreign key to **region\_rel**.region\_id
- **earnings**(date, region\_id, profession\_id, ave\_weekly\_earnings)
  - profession\_id is a foreign key to **prof\_rel**.profession\_id
  - region\_id is a foreign key to **region\_rel**.region\_id
- **employment**(date, region\_id, labor\_force, employment\_level, labor\_force\_participation\_rate, unemployment\_rate, employment\_population\_ratio)
  - region\_id is a foreign key to **region\_rel**.region\_id

```
CREATE TABLE employment
(
    date DATE NOT NULL,
    region_id INT NOT NULL,
    labor_force INT,
    employment_level INT,
    labor_force_participation_rate FLOAT,
    unemployment_rate FLOAT,
    employment_population_ratio FLOAT,
    PRIMARY KEY (date, region_id),
    FOREIGN KEY (region_id) REFERENCES region_rel(region_id)
);
```

```
CREATE TABLE earnings
(
    date DATE NOT NULL,
    region_id INT NOT NULL,
    profession_id INT NOT NULL,
    ave_weekly_earnings FLOAT,
    PRIMARY KEY (date, region_id, profession_id),
    FOREIGN KEY (region_id) REFERENCES region_rel(region_id),
    FOREIGN KEY (profession_id) REFERENCES prof_rel(profession_id)
);
```

```
CREATE TABLE food_prices
(
    date DATE NOT NULL,
    region_id INT NOT NULL,
    sliced_bacon_lb FLOAT,
    white_bread_lb FLOAT,
    coffee_lb FLOAT,
    eggs_dz FLOAT,
    gas_gl FLOAT,
    PRIMARY KEY (date, region_id),
    FOREIGN KEY (region_id) REFERENCES region_rel (region_id)
);
```

```
CREATE TABLE region_rel
(
```

```
    region_id INT NOT NULL PRIMARY KEY,  
    reigon TEXT NOT NULL  
);  
CREATE TABLE inflation  
(  
    date DATE NOT NULL,  
    region_id INT NOT NULL,  
    cpi FLOAT,  
    cpi_less_food_energy FLOAT,  
    cpi_medical FLOAT,  
    PRIMARY KEY (date, region_id),  
    FOREIGN KEY (region_id) REFERENCES region_rel(region_id)  
);  
CREATE TABLE prof_rel  
(  
    profession_id INT NOT NULL PRIMARY KEY,  
    profession TEXT NOT NULL  
);
```

## Screen Shots of Uploads

### Select: prof\_rel

9 rows have been imported. 23:10:07 SQL command

Select data

Show structure

Alter table

New item

Select

Search

Sort

Limit

50

Text length

100

Action

Select

SELECT \* FROM "prof\_rel" LIMIT 50 (0.001 s) Edit

<input type="checkbox"/> Modify	profession_id	profession
<input type="checkbox"/> edit	1	information
<input type="checkbox"/> edit	2	education
<input type="checkbox"/> edit	3	legal
<input type="checkbox"/> edit	4	insurance
<input type="checkbox"/> edit	5	financial
<input type="checkbox"/> edit	6	leisure and hospitality
<input type="checkbox"/> edit	7	construction
<input type="checkbox"/> edit	8	manufacturing
<input type="checkbox"/> edit	9	all

Whole result

Modify

Selected (0)

Export (9)

### Select: inflation

540 rows have been imported. 20:59:40 SQL command

Select data

Show structure

Alter table

New item

Select

Search

Sort

Limit

50

Action

Select

SELECT \* FROM "inflation" LIMIT 50 (0.001 s) Edit

<input type="checkbox"/> Modify	date	region_id	cpi	cpi_less_food_energy	cpi_medical
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## Select: food\_prices

540 rows have been imported. 21:23:34 SQL command

Select data Show structure Alter table New item

Select

Search

Sort

Limit  
50

Action  
Select

SELECT \* FROM "food\_prices" LIMIT 50 (0.001 s) Edit

<input type="checkbox"/> Modify	date	region_id	sliced_bacon_lb	white_bread_lb	coffee_lb	eggs_dz	gas_gl
<input type="checkbox"/> edit	1980-01-01	1	1.453	0.501	3.208	0.870	1.131

## Select: earnings

7,218 rows have been imported. 21:32:48 SQL command

Select data Show structure Alter table New item

Select

Search

Sort

Limit  
50

Action  
Select

SELECT \* FROM "earnings" LIMIT 50 (0.000 s) Edit

<input type="checkbox"/> Modify	date	region_id	profession_id	ave_weekly_earnings
<input type="checkbox"/> edit	2006-03-31	7	1	961.2

## Select: employment

4,020 rows have been imported. 21:41:20 SQL command

Select data Show structure Alter table New item

Select

Search

Sort

Limit  
50

Action  
Select

SELECT \* FROM "employment" LIMIT 50 (0.002 s) Edit

## Select: region\_rel

7 rows have been imported. 20:57:41 SQL command

Select data Show structure Alter table New item

Select	Search	Sort	Limit	Text length	Action
			50	100	Select

SELECT \* FROM "region\_rel" LIMIT 50 (0.001 s) Edit

<input type="checkbox"/> Modify	region_id	reigon
<input type="checkbox"/> edit	1	Washington
<input type="checkbox"/> edit	2	Utah
<input type="checkbox"/> edit	3	Oregon
<input type="checkbox"/> edit	4	Nevada
<input type="checkbox"/> edit	5	Colorado
<input type="checkbox"/> edit	6	California
<input type="checkbox"/> edit	7	National

Whole result

Modify

Selected (0)

Export (7)