



Do wages keep up with prices?

Run each command in Stata, fill in what you find, and notice the pattern across 12 economies.

STEP 1 Get the wage data

```
import delimited "https://sdmx.oecd.org/public/rest/data/OECD.SDD.TPS,DSD_EAR@DF_HOU_EAR,/USA+JPN
+DEU+GBR+FRA+ITA+CAN+ESP+KOR+MEX+NLD+SWE.EAR.IX.Y.C.S1.A?format=csvfilewithlabels", clear
case(lower)†
keep ref_area referencearea time_period obs_value
rename (ref_area referencearea time_period obs_value) (country_code country_name year wages)
save wages, replace
```

STEP 2 Get the price data

```
import delimited "https://sdmx.oecd.org/public/rest/data/OECD.SDD.TPS,DSD_PRICES@DF_PRICES_ALL,/U
SA+JPN+DEU+GBR+FRA+ITA+CAN+ESP+KOR+MEX+NLD+SWE.A.N.CPI.IX._T.N._Z?format=csvfilewithlabels",
clear case(lower)
keep ref_area time_period obs_value
rename (ref_area time_period obs_value) (country_code year prices)
```

STEP 3 Put wages and prices side by side

```
merge 1:1 country_code year using wages, keep(match) nogenerate
encode country_name, generate(country)
```

How many country-years have both wages and prices? _____

STEP 4 Compute year-ended growth rates

```
tsset country year
gen wage_growth = 100 * (wages - L.wages) / L.wages
gen inflation = 100 * (prices - L.prices) / L.prices
keep if year >= 1960
```

US wage growth in 1974? _____ US inflation in 1974? _____

STEP 5 Draw the 12-panel chart

```
twoway line wage_growth inflation year, by(country, cols(4) yrescale) legend(order(1 "Wage growth"
2 "Inflation")) ylabel("Annual percent change in wages or prices")
```

STEP 6 Do wages rise one-for-one with prices?

Fit wage growth = $a + b \times$ inflation, then test whether $b = 1$:

```
regress wage_growth inflation if country_code == "USA"
test inflation = 1
regress wage_growth inflation if country_code == "GBR"
test inflation = 1
```

US: $b =$ _____ p-value for $b = 1$? _____ UK: $b =$ _____ p-value for $b = 1$? _____

What do you notice?

1. Look across the 12 panels. In how many countries do wage growth and inflation rise and fall together?
2. $b = 1$ means wages keep pace with prices. Where can you reject $b = 1$ — and are wages gaining or falling behind?
3. When inflation spiked in the 1970s, did wage growth match it, exceed it, or fall short?

[†] No API key needed: Steps 1–2 read the data straight from the OECD's public server (needs internet and Stata 14+). Copy the URLs from the do-file.