

The monthly change may be *inside* the error

One mechanism of official statistics — why a jobs or survey number comes with a confidence interval, and why a “move” smaller than that band may be no move at all.

BEFORE YOU BEGIN

How This Guide Works

This is part of **Incognati Civics**, applying the field-guide format to the official statistics the government publishes — jobs, prices, crime, output, deaths — the numbers themselves and the way they are read, examined the same way regardless of which party the figure happens to help or hurt. Each specimen goes deep on one mechanism, with agency methodology, official records, and nonpartisan scholarship listed in full on the references page.

INCOGNATI CIVICS — OFFICIAL DATA REPORTING

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Point Estimate vs. Sampling Error

Intra Errorem

Governing precedent / case BLS CES/CPS sampling error Status Recurring every survey release

OBSERVED SPECIMEN	MONTHLY EMPLOYMENT SITUATION; CENSUS SURVEYS
<i>The payroll jobs number is estimated from a large but partial sample, so it carries a sampling error: BLS reports that the monthly change has a 90% confidence interval of roughly plus or minus 130,000 jobs. A reported gain of 100,000 is therefore not statistically distinguishable from zero, and a one-month “drop” can be sampling noise. Census survey figures carry their own margins. Headlines treat the single point estimate as exact, and a swing within the band gets read as a real shift in direction.</i>	

THE HOOK	THE MECHANISM
A precise-looking point estimate is reported without its margin, so small wiggles look like real changes.	Sample-based statistics have a sampling error; agencies publish confidence intervals. A change smaller than the interval is not statistically significant — it may be noise.

Field mark: before reading a one-month move as a trend, check the sampling error — BLS's own figure is about $\pm 130,000$ jobs, so a change inside that band may be statistically indistinguishable from no change.

See the full references page for complete citations.

References

every source checkable at the link provided; DOIs given where the source has one

AGENCY METHODOLOGY · BLS

U.S. Bureau of Labor Statistics, “Employment Situation Technical Note” — reliability of the estimates.

<https://www.bls.gov/news.release/empsit.tn.htm>

BLS states the confidence interval for the monthly payroll change (about $\pm 130,000$ at 90%).

AGENCY METHODOLOGY · CENSUS

U.S. Census Bureau, “Understanding and Using American Community Survey Data” — margins of error.

<https://www.census.gov/programs-surveys/acs/library/handbooks/general.html>

Census documentation on sampling error and margins of error for its survey estimates.

Reading a Survey Number: A Gut Check

four questions before a one-month figure convinces you the trend has turned

1 Find the margin

Survey figures come with a confidence interval; agencies publish it.

2 Compare change to error

A move smaller than the margin may not be a real change.

3 Distrust single months

One data point inside the band is weak evidence of a turn.

4 Look for the trend

Several months moving together beats one noisy reading.

INCOGNATI CIVICS

The Series Continues

This is Specimen No. 9 of the Official Data Reporting section within Incognati Civics. The full queue of twelve specimens is listed on the cover. This section joins Elections and Federal Laws within Civics, with local government and institutional communications planned beyond it. The Incognati Atlas catalogs the underlying patterns across all of it.