

Higher GDP, Lower GDP per Capita

Population Coverage and Türkiye's 2025 Benchmark Revision

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July 7, 2026

KEY MESSAGE

Türkiye's September 2025 main revision raised nominal GDP for 2023 by 2.1% yet lowered GDP per capita by 1.8%. A population correction explains the gap: the Turkish Statistical Institute (TurkStat) added Syrians under temporary protection to the population count for 2013–2024, but left the population underlying its labor force statistics unchanged. Because the Asia Quality-Adjusted Labor Input Database (AQALI) inherits those statistics unadjusted, the same asymmetry may overstate Türkiye's labor productivity by 2–4%—too uncertain for a formal correction but large enough to warrant an explicit caveat.

WHY THIS MATTERS

TurkStat (2025) rebased Türkiye's GDP to the 2023 Supply and Use Tables and backcasted the series to 1995, citing expanded use of administrative records, updated classifications, and methodological improvements—notably a revised FISIM reference rate, recalibrated imputed rent, first-time capitalization of dwelling repairs, and an expanded non-observed economy account. The compositional effect runs opposite to China's concurrent revision, which shifted from investment toward consumption (PRN2614): household consumption falls 7.1%, cutting its GDP share from 59.4% to 54.0%, while gross fixed capital formation (GFCF) rises 5.3%, lifting the combined share of GFCF and inventory changes from 30.0% to 34.6%.

A separate correction moves GDP per capita in the opposite direction: within the national accounts, following ESA 2010's residency criterion, TurkStat added Syrians under temporary protection—excluded from the Address-Based Population Registration System (ADNKS)—to the mid-year population used for per capita GDP, for 2013–2024, so GDP per capita for 2023 falls 1.8% even as nominal GDP rises. The ADNKS itself, which also underpins TurkStat's Labour Force Survey (LFS), was not adjusted—raising the question this note addresses.

EVIDENCE: TURKIYE-JAPAN LABOR PRODUCTIVITY COMPARISON

This note's comparison relies on AQALI, which KEO constructs mainly from each economy's labor force survey and population census, cross-classified by gender, age, education, and employment status. The most relevant available source on Syrians under temporary protection—a one-off identification of Syrian respondents in 2017 LFS microdata (Pinedo Caro 2020)—offers only a coarse breakdown, and predates the post-2016 liberalization of Syrian work permits and the acceleration of returns since late 2024. AQALI 2026 does not include this population in Türkiye's labor input.

Türkiye's per-worker labor productivity in 2024—an unadjusted labor input set against output that already reflects TurkStat's 2025 benchmark revision—stands at USD 96,100 at 2024 US prices (58% of the US level), fractionally above Japan's USD 93,100 (56%)—despite Türkiye's per capita GDP being roughly 25% below Japan's. On a per-hour basis, however, the ranking reverses: Türkiye records USD 49.6 in 2024, compared with Japan's USD 55.5. This reversal is

generally attributed to two factors: Türkiye’s lower employment rate (38% in 2024, against 55% in Japan), which mechanically raises output per remaining worker; and total hours worked, which—except for Japan—no Asian economy publishes as part of its official national accounts, with AQALI’s own hours-worked estimates carrying a wider margin of uncertainty than its headcount-based employment measure. Both factors already warrant caution when interpreting the per-worker/per-hour gap; the population coverage bias noted above adds a further reason.

INTERPRETATION

The population correction can be recovered from TurkStat’s own published tables (Tables 2 and 5 of TurkStat (2025)) and closely tracks the [Presidency of Migration Management](#)’s published stock of Syrians under temporary protection—within 50,000 persons in every year through 2023—confirming the correction is essentially coextensive with this population.

Applying an employment ratio to this population would lower Türkiye’s measured per-worker productivity, though the extent remains unclear given the fragmentary evidence. Pinedo Caro (2020) reports 813,781 employed Syrians in 2017, against a total Syrian population of 3.4 million at the time—an implied ratio of about 24%. Applied to the 2023–2024 stock, this adds 0.7 million workers, or 2.2–2.4% of Türkiye’s reported employment. Türkiye’s own overall employment rate (38%) gives an upper bound of 3.5–3.9%, though it likely overstates participation given documented barriers to formal employment. Either way, per-worker productivity would fall by roughly 2–4%—comparable to the entire 3.2% gap with Japan, enough to close it at the low end or reverse it at the high end.

MEASUREMENT CONSIDERATIONS

The resulting bias in measured labor productivity likely leans toward overstatement, though its precise magnitude cannot be established. Labor input in AQALI is undercounted, but output may be partially so as well. For Syrians employed by registered enterprises, output is plausibly already captured through the same administrative records used in the 2025 benchmark revision, whereas for the informally employed share, it remains unclear whether TurkStat’s non-observed economy adjustment—based on comparing LFS and industry-survey employment (Section 4.4 of TurkStat (2025))—captures it, since LFS itself excludes this population. This asymmetry, more pronounced for formally employed Syrians, underpins this note’s caveat regarding the interpretation of Türkiye’s labor productivity comparisons.

IMPLICATIONS

01

Türkiye’s per-worker productivity edge over Japan is usually attributed to employment rates and hours worked uncertainty; an unadjusted population base provides further reason to reconsider it.

02

The resulting bias in Türkiye’s measured labor productivity likely overstates it, but by an unknown amount—warranting interpretive caution rather than a formal correction to AQALI.

03

The case of Türkiye illustrates how population coverage gaps can distort international productivity comparisons when population, labor, and production statistics are misaligned.

REFERENCES

TurkStat (2025) “Studies undertaken within the Scope of “Main Revision” in National Accounts: Explanatory Note,” Directorate of National Accounts Department, 1 September.

Pinedo Caro, L. (2020) “Syrian Refugees in the Turkish Labour Market: A Socio-Economic Analysis,” *Sosyoekonomi*, 28(46), 51–74. <https://doi.org/10.17233/sosyoekonomi.2020.04.03>

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