

Converging Aggregates, Diverging Components

Iran's 2021 Benchmark Revision

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KEY MESSAGE

Iran's rare dual national-accounts system—separate GDP series from the Statistical Centre (SCI) and the Central Bank (CBI)—saw its gap narrow from 38% to 20% under the 2021 benchmark revision. That looks like progress. It isn't straightforward: the expenditure-side convergence mostly reflects offsetting reversals rather than genuine agreement, while at least one production-side sector (electricity) remains as divergent as before, possibly because measurement has improved. Aggregate direction is an unreliable guide to whether the two systems are actually converging.

WHY THIS MATTERS

Very few countries maintain two separate, institutionally distinct national accounts systems. In Iran, SCI, an entity affiliated with the Plan and Budget Organization, and CBI, an independent monetary authority, each compile GDP from their own primary data—large, multi-year gaps between them suggest no effective mechanism for reconciliation. Productivity accounts can mix components across the two series rather than adopting either wholesale—but only by knowing which components are informative. That is the question this note takes up. Both institutions have now rebased GDP to the same reference year, 1400 (the Iranian year beginning in March 2021)—SCI from a 2011 base, CBI from a 2016 base. That both converged on the same reference year is notable, but nothing ensures they applied a consistent methodology in getting there.

EVIDENCE: FINAL DEMAND UNDER A DUAL REVISION

At the aggregate level, the 2021 revision appears to reflect straightforward convergence: the SCI/CBI ratio for GDP fell from 1.38 to 1.20. Figure 1 shows why this is misleading. Of GDP's three largest components, two, consumption and gross fixed capital formation (GFCF), reversed which series was larger (consumption: 0.92→1.28; GFCF: 1.02→0.73), while inventories converged without reversing (3.92→1.65). GDP's convergence is largely coincidental—the net effect of two large components moving in opposite directions.

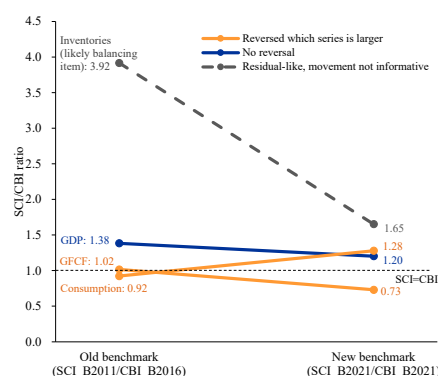


Figure 1. Final Demand: SCI/CBI Ratio Before and After the 2021 Benchmark Revision

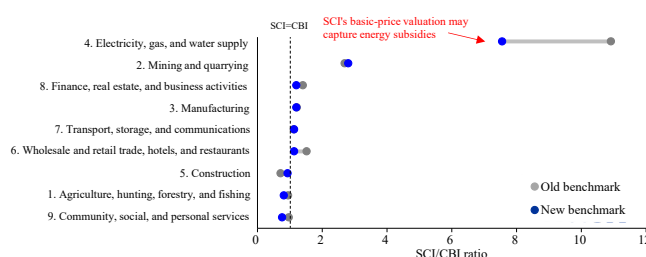
Inventories deserve a separate caveat. Before the revision, recorded inventory changes reached 36.9% of GDP for SCI and 13.0% for CBI—both large enough to raise questions about genuine stockbuilding. After the revision, the figures converged to 17.7% and 12.9%, respectively, the most dramatic movement in Figure 1. SCI reports no separate statistical discrepancy line, so any such discrepancy is necessarily absorbed into inventories; CBI reports one separately, yet its inventory series has also stayed persistently elevated, suggesting some balancing-item behavior even there.

This convergence, if inventories function as a balancing item in both systems, mechanically tracks the reshuffling of other components rather than any genuine narrowing of stockbuilding. The shrinking residual may itself signal improvement—not in measured inventories, but in the internal consistency of SCI’s own production- and expenditure-side estimates.

EVIDENCE: INDUSTRY VALUE ADDED UNDER A DUAL REVISION

Industry-level value added shows a different pattern (Figure 2). No industry reversed which series was larger; the gap narrowed in about half the industries and widened in the rest. Most notable is electricity, gas, and water supply, where SCI remained 7.6 times larger than CBI after the revision, down from 10.9 before it—an outlier far beyond any other industry’s ratio. SCI’s revision formally shifted industry valuation from producer to basic prices—which should raise electricity’s value added, given its subsidies, not lower it. That it fell instead suggests SCI’s “producer price” figure was already cost-based rather than tariff-based, closer to basic prices than the label implied; the decline reads as a statistical correction, not a new subsidy pickup. Economy-wide, net indirect taxes on products swung from +172 to –4,425 trillion rials with the same revision—consistent with domestic subsidies moving, for the first time, out of industry figures and into this bridge item. CBI’s electricity value added, an order of magnitude smaller than either SCI figure, fits a valuation closer to actual, subsidized tariff revenue than to basic prices. Both readings remain hypotheses, not confirmed methodology.

Figure 2. Industry Value Added: SCI/CBI Ratio Before and After the 2021 Benchmark Revision



MEASUREMENT CONSIDERATIONS

Three qualifications apply. First, neither institution’s published methodology was accessible for this review, so the valuation-basis hypotheses for SCI and CBI remain plausible, not confirmed. Second, the balancing-item interpretation of inventories is inferred from their scale and behavior, not verified against either institution’s procedure. Third, this note examines a single benchmark revision; whether the patterns here are stable features or artifacts of this revision cannot be established without a further cycle—productivity accounts built on either series should be understood as provisional in that sense.

IMPLICATIONS

01

Macro-level convergence between competing national accounts should not be taken as evidence of improved reliability without component-level verification.

02

In Iran, recorded inventory changes may function largely as a balancing item rather than as a measure of genuine stockbuilding.

03

Persistent divergence is not, by itself, evidence of unreliable measurement—it may reflect a subsidy or other distortion one series captures, and the other omits.

REFERENCES

Central Bank of Iran (2025) 15 (حساب‌های ملی فصلی ایران به قیمت‌های جاری و ثابت سال پایه 1400 طی دوره 1403–1403) (*Quarterly National Accounts of Iran at Current and Constant Prices, Base Year 1400, 1395–1403*), Economic Accounts Department, Central Bank of Iran.

Statistical Centre of Iran (2025) شاخص‌های کلان اقتصادی و اجتماعی کشور (Macroeconomic and Social Indicators of the Country), No. 50, Statistical Centre of Iran, September.

This note is part of the Productivity Research Notes series, examining key issues in productivity and economic performance in Asia. The views expressed are those of the author(s). Inquiries may be directed to sankenoffice@info.keio.ac.jp.

