

**Technical Note and Announcement:  
Quarterly Estimates of GDP for October-December 2024  
(Second Preliminary Estimates)**

**Technical Note:**

**(1) Major Factors of the Revision from the First Preliminary Estimates to the Second Preliminary Estimates**

The regular revision through incorporating newly available source statistics replaces the first preliminary estimates by the second preliminary estimates and its major factors are as follows.

<Original Series>

➤ Private Non-Residential Investment

First Preliminary: Estimates for the latest quarter are based on supply-side source statistics.

Second Preliminary: Estimates for the latest quarter integrate supply-side and demand-side source statistics, since demand-side statistics such as *Quarterly Financial Statements Statistics of Corporations by Industry* (Ministry of Finance) have become available.

➤ Change in Private Inventories

First Preliminary: Estimates of “Materials and Supplies” and “Work-in-Progress” (nominal and real original series) for the latest quarter are provided by time-series projection with the ARIMA model used in the seasonal adjustment.

Second Preliminary: Estimates of “Materials and Supplies” and “Work-in-Progress” for the latest quarter incorporate *Quarterly Financial Statements Statistics of Corporations by Industry etc.*

➤ Other addition and revision of source statistics

First Preliminary: If any source statistics are not yet available for any months in the latest quarter, extrapolation is conducted. If preliminary figures are available but final figures are not, the former are incorporated. Estimates incorporate source statistics which are available on the day *Balance of Payments (Preliminary)* for the third month of the latest quarter are released.

Second Preliminary: If some source statistics have become available or been replaced by fixed estimates or revised for some reason, they are updated. Estimates incorporate source statistics which are available on the day *Quarterly Financial Statements Statistics of Corporations by Industry* for the latest quarter are released.

### <Seasonally Adjusted Series>

Seasonally adjusted series are revised from January-March 1994 (both nominal and real), since the seasonal adjustment is conducted with the latest estimates of original series updated as above.

## (2) Other Issues

### ➤ Seasonal Adjustment

With regard to the outlier in the preliminary estimates (from January-March 2024), provisional dummies are set in case that the estimated value is out of the forecast range of X-12-ARIMA. More specifically, in each period from January-March 2024, additive outlier (AO) is applied on the period if the estimated value of original series falls outside the 99% confidence interval of the forecast series starting from the previous period.

The methodology of the second preliminary estimates, including the above, is changed based on the following announcement.

[https://www.esri.cao.go.jp/jp/sna/data/reference1/siryou/2025/pdf/announce\\_20250227.pdf](https://www.esri.cao.go.jp/jp/sna/data/reference1/siryou/2025/pdf/announce_20250227.pdf)

### ➤ Supply-side and demand-side estimates in the estimation process of Private Non-Residential Investment in Quarterly Estimates of GDP for October-December 2024 (Second Preliminary Estimates)

In the estimation process of Private Non-Residential Investment for October-December 2024 in Quarterly Estimates of GDP for October-December 2024 (Second Preliminary Estimates), the supply-side estimate of quarter-to-quarter percent change is 7.3% (nominal original series) based on supply-side source statistics and the demand-side estimate of quarter-to-quarter percent change is 4.8% (nominal original series) based on demand-side source statistics such as *Quarterly Financial Statements Statistics of Corporations by Industry*.

### ➤ Estimates of Change in Private Inventories by four categories in Quarterly Estimates of GDP for October-December 2024 (Second Preliminary Estimates)

Estimates of Change in Private Inventories by four categories in Quarterly Estimates of GDP for October-December 2024 (Second Preliminary Estimates) are as follows (real seasonally adjusted series, annualized):

( Billions of Chained (2015) Yen )

	2023/ 10-12	2024/ 1-3	4-6	7-9	10-12	Contributions to Change in Real GDP at 2024/10-12 (%)
Change in Private Inventories	-468.0	608.1	649.4	1,155.5	-415.2	-0.3
Materials and Supplies	-253.6	-520.6	-432.3	590.4	-312.9	-0.2
Work-in-Progress	207.1	951.9	713.1	432.1	70.3	-0.1
Finished Goods	162.7	395.9	546.9	103.2	-392.8	-0.1
Wholesale and Retail Trade	-570.4	-74.4	-56.9	-34.9	283.1	0.1

- Estimates of real seasonally adjusted series of Change in Private Inventories (“Materials and Supplies” and “Work-in-Progress”) in Quarterly Estimates of GDP for January-March 2025 (First Preliminary Estimates)

Change in Private Inventories (“Materials and Supplies” and “Work-in-Progress”, real seasonal adjusted series, annualized) for January-March 2025 are projected as 182.5 billion yen (495.5 billion yen as quarter-to-quarter difference) for “Materials and Supplies” and 239.2 billion yen (174.2 billion yen as quarter-to-quarter difference) for “Work-in-Progress”, by the ARIMA model based on the information incorporated in Quarterly Estimates of GDP for October-December 2024 (Second Preliminary Estimates).

It should be noted that those figures are not continuous to the real seasonally adjusted series in Quarterly Estimates of GDP for October-December 2024 (Second Preliminary Estimates) since those are seasonally adjusted up to January-March 2025 after the projection of real original series for January-March 2025 with the ARIMA models. In addition, those figures for January-March 2025 may be revised in Quarterly Estimates of GDP for January-March 2025 (First Preliminary Estimates) since the estimates up to October-December 2024 will be updated by the revision of source statistics etc.

## **Announcement:**

### **Release Schedule of the Quarterly Estimates of GDP**

**First Preliminary Estimates for January-March 2025:**

8:50 A.M. JST, Friday, May 16, 2025.

**Second Preliminary Estimates for January-March 2025:**

8:50 A.M. JST, Monday, June 9, 2025.

**First Preliminary Estimates for April-June 2025:**

8:50 A.M. JST, Friday, August 15, 2025.

**Second Preliminary Estimates for April-June 2025:**

8:50 A.M. JST, Monday, September 8, 2025.

**First Preliminary Estimates for July-September 2025:**

8:50 A.M. JST, Monday, November 17, 2025.

**Second Preliminary Estimates for July-September 2025:**

8:50 A.M. JST, Monday, December 8, 2025.

**First Preliminary Estimates for October-December 2025:**

8:50 A.M. JST, Monday, February 16, 2026.

**Second Preliminary Estimates for October-December 2025:**

8:50 A.M. JST, Tuesday, March 10, 2026.

The above schedule may be changed due to changes in the release schedule of source statistics etc.