



Japanese Economy Monthly Forecast

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Headlines

● Review of latest official data

▶ This forecast reflects data released by the beginning of December. About one-third of all data required for an accurate estimation of 2022 Q4 GDP have been released.

▶ In October, the Index of Industrial Production fell -2.6% MoM, marking the second consecutive month of decline. METI downgraded its assessment of the economy.

▶ Total real cash salaries in October fell for the seventh month in a row, down -2.6% YoY.

▶ In October, both the real total Consumption Trend Index and the real Consumption Activity Index increased relative to their Q3 averages.

▶ In October, planned residential construction expenditure fell MoM for second month in a row (-1.3%). On the other hand, capital goods shipments index increased for the first time in two months (+5.3% MoM). Relative to their Q3 averages, the former was -2.1% lower, whereas the latter was +2.5% higher.

▶ According to the Ministry of Finance, October export volume index fell -4.5% relative to the Q3 average, and imports fell -3.0%. However, according to the Bank of Japan, real exports expanded +2.1% and real imports rose +4.1% relative to the Q3 average. Although the reported volume-based figures are negative while the real figures are positive, the contribution of net exports to GDP growth is negative in neither case.

● 2022 Q4 real GDP growth forecast update

▶ Our expenditure-side CQM forecast for real GDP growth in 2022 Q4 is an annualized +2.6% QoQ. On the other hand, the production-side forecast figure is an annualized -0.6%. The average of the two forecasts is an annualized +1.0% (Figure 1). The low production-side figure reflects the decline in the Index of Industrial Production.

● 2022 Q4 inflation forecast update

▶ In October, the National Consumer Price Index (CPI) rose +3.7% YoY, marking the 14th consecutive month of inflation. Therein, the prices of goods rose by +6.5%, and the prices of services rose by +0.8% YoY.

▶ Our CQM forecasts for the private final consumption expenditure deflator and the domestic demand deflator in 2022 Q4 are respectively +0.9% and +0.8 QoQ. As the terms of trade are showing a slight improvement, we forecast a GDP deflator of +0.8% QoQ (Figure 2).

Fig 1 CQM Forecast: Real GDP Growth Rate Oct-Dec (Q4) 2022 (% , QoQ annualized growth)

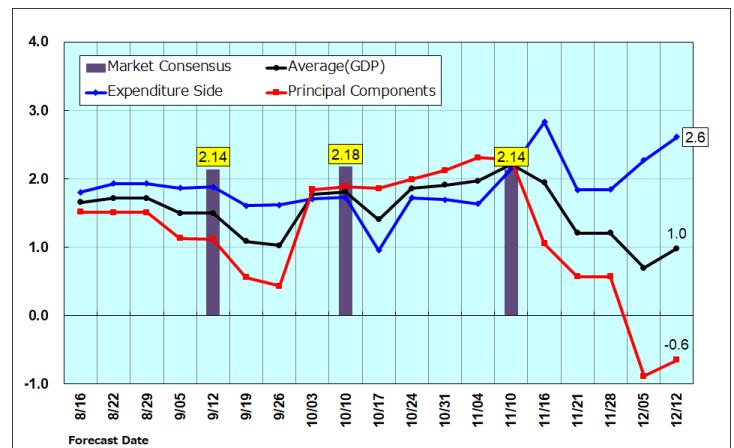
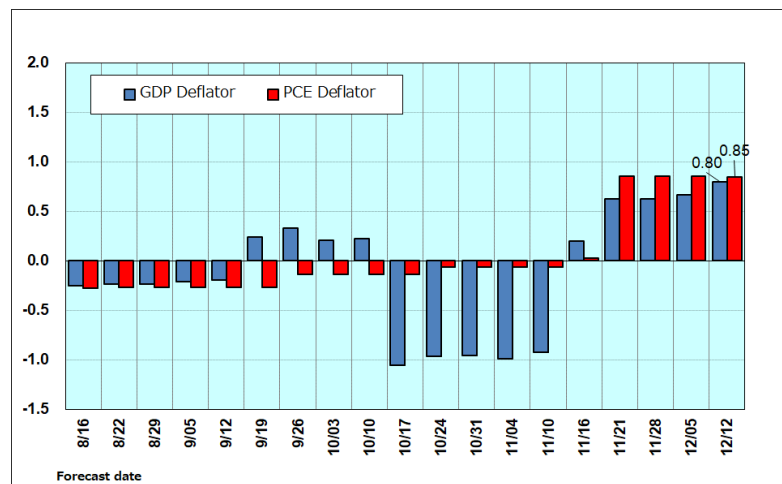


Fig 2 CQM Forecast: Inflation Oct-Dec (Q4) 2022 (% , QoQ growth)



We used the Current Quarter Model (CQM) methodology developed by Professor Emeritus L. R. Klein to create two forecasting models for the Japanese economy: a demand-side model and a production-side (principal component analysis) model. We refer to the forecasts by the former model as the main series, and those by the latter model, as well as the average of both models, as the reference series. Forecasts made using the CQM model are renewed continuously, incorporating the latest weekly data, which makes it possible to determine and trace the impacts of the latest short-term trends on macroeconomic conditions.

Table 1: Main Economic Indicators (latest)

Release Date	Data Month	Economic Indicator	Value/ Index Score	Change	
				MoM	YoY
12/9	October	Information Services Industry Sales (billion JPY)	1,161.2		+6.1%
12/8	November	Economy Watchers Survey			
		Current Conditions Diffusion Index	48.1	-1.8	
	Future Conditions Diffusion Index	45.1	-1.3		
	October	Balance of Payments			
		Current account (billion JPY)	-64.1	+1,280.0	-1,798.8
Exports (billion JPY)		8,989.2	+3.0%	+26.9%	
Imports (billion JPY)	10,864.6	+5.4%	+56.9%		
12/7	October	Monthly Labor Statistics (preliminary figures)			
		Gross average salary per worker (JPY)	275,888		+1.8%
		Total working hours	137.2		-0.9%
	October	Family Income and Expenditure Survey (households with 2 or more people)			
		Nominal consumption expenditure (JPY)	298,006	+1.7%	+5.7%
		Real consumption expenditure		+1.1%	+1.2%
	October	Consumption Trend Index (2020=100)	104.9	-0.1%	
	October	Consumption Activity Index (2015=100)	99.5	+2.1%	
	October	Index of Business Conditions (preliminary, 2015=100)			
		Leading indicators	99.0	+0.8	
		Coincident indicators	99.9	-0.9	
Lagging indicators		99.4	+0.3		
12/6	September	Synthetic Consumption Index (2015=100)	99.1	+0.9%	
12/2	November	Food Buffer Stock (billion JPY)	-20.3		+5.3
12/1	November	New Car Sales (vehicles)	308,059		+5.6%
	November	Consumer Confidence Index (SA)	28.6	-1.3	
11/30	October	Indices of Industrial Production (preliminary figures, 2015=100)			
		Production	95.9	-2.6%	
		Shipments	94.1	-1.1%	
		Inventories	103.0	-0.8%	
	October	New Housing Starts			
		New housing starts (SA, Unit)	76,590	+1.5%	-1.8%
		Planned residential construction expenditure (billion JPY)	1,313.5	-1.3%	-2.7%
September	Construction Costs Deflator (2015=100)				
	Housing construction	119.9		+4.1%	
	Public works	116.5		+3.9%	
11/29	October	Labor Force Survey			
		Total employment (millions)	67.36	-0.07	
		Total unemployment (millions)	1.78	-0.05	
		Unemployment rate (%)	2.6%	0.0%pt	
	October	General Job Placement Situation			
		Job offers-to-applicants ratio	1.35	+0.01%pt	
	October	Current Survey of Commerce (preliminary figures)			
	Retail trade (billion JPY)	13,082.0	+0.2%	+4.3%	

11/28	September	Producer Price Index for Intermediate and Final Demand (2015=100) Capital goods Consumer goods	103.4 110.5		+3.2% +6.1%
11/25	November October	Tokyo Region Consumer Price Index (2020=100) Core Corporate Services Price Index (2015=100) Overall index	103.8 107.4	+0.5%	+3.8% +1.8%
11/22	September	Monthly Labor Statistics (final figures) Gross average salary per worker (JPY) Total working hours	276,113 137.2		+2.2% +1.6%
11/18	September October	General Construction Statistics Private non-residential construction (billion JPY) Public works (billion JPY) National Consumer Price Index (2020=100) Core index	927.0 1,877.8 103.4		+11.7% +1.3% +3.6%
11/17	October	Trade Statistics (customs clearance level) Trade balance (billion JPY) Exports (billion JPY) Imports (billion JPY)	-2,162.3 9,001.5 11,163.8	+12.9% +2.2% +4.2%	+2283.5% +25.3% +53.5%
11/16	September September	Tertiary Industry Activity Index (2015=100) Private Core Machinery Orders (billion JPY)	99.5 868.0	-0.4% -4.6%	
11/15	September	Indices of Industrial Production (final figures, 2015=100) Production Shipments Inventory Production capacity index Capacity utilization ratio	98.5 95.1 103.8 95.5 95.2	-1.7% -2.5% +2.9% -0.4%	+0.7%
11/14	October	Public Works Advanced Securities Statistics Contract amount (billion JPY) Number of contracts	1,055.8 21,771		-1.9% -8.9%
11/11	October	Domestic Corporate Price Index (2020=100) Corporate Price Export Price Import Price	117.5 131.9 189.0	+0.6% +1.2% +0.1%	+9.1% +18.8% +42.6%

Table 2: CQM Forecast: GDP Tracking

Forecast date	Real GDP			Deflator		Real GDP			Deflator		Real GDP			Deflator	
	Expenditure side	Production side (PCA)	Average	GDP	PCE	Expenditure side	Production side (PCA)	Average	GDP	PCE	Expenditure side	Production side (PCA)	Average	GDP	PCE
	2022Q3					2022Q4					2022Q4				
	SAAR (%)			QoQ (%)		SAAR (%)			QoQ (%)		SAAR (%)			QoQ (%)	
8/16	1.6	1.3	1.5	-0.6	0.3	1.8	1.5	1.7	-0.2	-0.3					
8/22	1.9	0.8	1.4	-0.4	0.5	1.9	1.5	1.7	-0.2	-0.3					
8/29	1.9	0.8	1.4	-0.4	0.5	1.9	1.5	1.7	-0.2	-0.3					
9/05	3.3	0.8	2.0	-0.3	0.5	1.9	1.1	1.5	-0.2	-0.3					
9/08															
9/12	1.3	1.6	1.5	-0.5	0.5	1.9	1.1	1.5	-0.2	-0.3					
9/19	0.7	0.6	0.6	-0.3	0.5	1.6	0.6	1.1	0.2	-0.3					
9/26	0.9	0.2	0.6	-0.1	0.8	1.6	0.4	1.0	0.3	-0.1					
10/03	2.4	2.6	2.5	-0.2	0.8	1.7	1.8	1.8	0.2	-0.1					
10/10	1.6	2.7	2.1	-0.2	0.8	1.7	1.9	1.8	0.2	-0.1					
10/17	0.2	2.6	1.4	-0.6	0.8	1.0	1.9	1.4	-1.1	-0.1					
10/24	0.3	3.3	1.8	-0.6	0.8	1.7	2.0	1.9	-1.0	-0.1					
10/31	0.3	3.3	1.8	-0.6	0.8	1.7	2.1	1.9	-1.0	-0.1					
11/04	0.4	3.1	1.8	-0.5	0.8	1.6	2.3	2.0	-1.0	-0.1					
11/10	2.7	3.0	2.8	-0.5	0.8	2.2	2.3	2.2	-0.9	-0.1					
11/15	<u>-1.2</u>			<u>-0.2</u>	<u>0.8</u>	0.0	0.0	0.0	0.0	0.0					
11/16						2.8	1.1	1.9	0.2	0.0	0.3	0.6	0.5	0.1	0.1
11/21						1.8	0.6	1.2	0.6	0.9	0.5	0.6	0.6	0.1	0.1
11/28						1.8	0.6	1.2	0.6	0.9	0.5	0.6	0.6	0.1	0.1
12/05						2.3	-0.9	0.7	0.7	0.9	0.4	-0.3	0.0	0.1	0.1
12/08	<u>-0.8*</u>			<u>-0.5*</u>	<u>0.4*</u>									0.0	0.0
12/12						2.6	-0.6	1.0	0.8	0.8	0.5	-0.4	0.1	0.1	0.1

Note: Underlined figures are 1st preliminary estimates, and figures marked by * are 2nd preliminary estimates.

Table 3-1: Gross Domestic Product at Chained 2015 Price: Y Billion

	Quarterly			Forecast		CY		FY	
	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2021	2022	2021	2022
GDP/GDE									
Gross Domestic Products	541,965	547,946	546,815	550,021	549,895	540,226	546,687	540,796	548,669
Private Consumption	289,951	294,768	295,115	296,563	296,937	287,894	294,099	288,614	295,846
Residential Investment	18,223	17,869	17,778	17,917	18,045	18,797	17,947	18,650	17,902
Nonresidential Investment	86,845	88,581	89,919	90,535	90,447	87,169	88,970	87,178	89,871
Change in Private Inventory	4,199	2,610	3,087	3,368	2,412	43	3,316	1,179	2,869
Government Consumption	118,052	118,931	119,073	119,142	119,655	117,047	118,800	117,823	119,200
Public Investment	26,325	26,510	26,759	26,708	26,674	28,532	26,575	27,563	26,663
Change in Public Inventory	-80	-112	-245	-192	-181	-84	-157	-67	-183
Net Exports	-1,059	-613	-3,993	-3,342	-3,415	1,122	-2,252	430	-2,841
Exports of Goods & Services	104,900	106,448	108,675	107,220	107,182	102,619	106,811	103,732	107,381
Imports of Goods & Services	105,960	107,061	112,668	110,562	110,598	101,497	109,063	103,302	110,222
Gross National Income	561,781	564,395	561,193	564,791	568,113	562,365	563,040	562,416	564,623
Memo:									
Total Demand	647,925	655,006	659,483	660,582	660,493	641,723	655,749	644,098	658,891
Upper Row: % change from the previous quarter Lower Row: % change from a year earlier									
Gross Domestic Products	-0.5	1.1	-0.2	0.6	0.0				
SAAR	-1.8	4.5	-0.8	2.4	-0.1				
% Change Year Ago	0.6	1.4	1.7	1.0	1.5	2.1	1.2	2.5	1.5
Private Consumption	-1.0	1.7	0.1	0.5	0.1				
% Change Year Ago	1.0	2.5	3.9	1.2	2.4	0.4	2.2	1.5	2.5
Residential Investment	-1.7	-1.9	-0.5	0.8	0.7				
% Change Year Ago	-3.1	-6.4	-5.3	-3.3	-1.0	-1.1	-4.5	-1.1	-4.0
Nonresidential Investment	-0.4	2.0	1.5	0.7	-0.1				
% Change Year Ago	-0.1	0.4	3.8	3.8	4.1	0.8	2.1	2.1	3.1
Government Consumption	0.5	0.7	0.1	0.1	0.4				
% Change Year Ago	2.7	1.5	0.3	1.5	1.4	3.5	1.5	3.4	1.2
Public Investment	-3.1	0.7	0.9	-0.2	-0.1				
% Change Year Ago	-11.3	-9.1	-5.1	-1.7	1.3	-1.9	-6.9	-6.4	-3.3
Exports of Goods & Services	1.2	1.5	2.1	-1.3	0.0				
% Change Year Ago	4.5	2.9	5.4	3.4	2.2	11.7	4.1	12.3	3.5
Imports of Goods & Services	3.7	1.0	5.2	-1.9	0.0				
% Change Year Ago	7.3	3.8	10.6	8.2	4.4	5.1	7.5	7.1	6.7
Gross National Income	-0.4	0.5	-0.6	0.6	0.6				
SAAR	-1.8	1.9	-2.2	2.6	2.4				
% Change Year Ago	0.1	-0.3	0.4	0.1	1.1	2.0	0.1	2.2	0.4
Total Demand	0.2	1.1	0.7	0.2	0.0				
SAAR	0.8	4.4	2.8	0.7	-0.1				
% Change Year Ago	0.0	12.6	3.1	2.2	1.9	2.6	2.2	3.2	2.3
Contribution to GDP Growth Rate									
Domestic Demand	0.0	1.0	0.4	0.5	0.0	1.1	1.9	1.8	2.1
Private Demand	0.1	0.8	0.4	0.5	-0.1	0.5	1.9	1.4	2.0
Public demand	-0.1	0.2	0.0	0.0	0.1	0.6	-0.1	0.4	0.0
Net Exports	-0.5	0.1	-0.6	0.1	0.0	1.0	-0.7	0.8	-0.6

Table 3-2: Gross Domestic Product at Current Prices: Y Billion

	Quarterly		Forecast			CY		FY	
	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2021	2022	2021	2022
GDP/GDE									
Gross Domestic Products	552,910	558,196	554,126	566,974	572,084	549,379	558,051	550,530	562,845
Private Consumption	301,262	308,677	310,240	314,931	315,956	293,986	308,778	296,250	312,451
Residential Investment	21,273	21,178	21,167	21,215	21,143	20,828	21,208	21,129	21,176
Nonresidential Investment	90,819	94,016	96,599	98,532	99,053	89,270	94,992	90,079	97,050
Change in Private Inventory	3,976	3,507	3,767	3,777	2,831	135	3,757	1,106	3,470
Government Consumption	119,932	120,167	122,008	122,542	123,051	117,711	121,162	118,968	121,942
Public Investment	28,943	29,583	30,104	29,966	29,882	30,510	29,649	29,807	29,884
Change in Public Inventory	-60	-102	-866	-330	-322	-108	-339	-89	-405
Net Exports	-13,235	-18,830	-28,894	-23,657	-19,509	-2,952	-21,154	-6,718	-22,722
Exports of Goods & Services	109,141	117,926	124,336	123,936	124,206	99,996	118,835	103,637	122,601
Imports of Goods & Services	122,375	136,755	153,230	147,593	143,715	102,948	139,989	110,355	145,323
Gross National Income	584,953	591,276	589,521	599,407	604,971	576,048	591,289	579,781	596,294
Memo:									
Total Demand	675,285	694,951	707,356	714,567	715,799	652,327	698,040	660,885	708,168
Compensation of Employees	291,994	293,828	294,614	295,002	295,331	288,746	293,860	289,508	294,694
Upper Row: % change from the previous quarter Lower Row: % change from a year earlier									
Gross Domestic Products	0.2	1.0	-0.7	2.3	0.9				
SAAR	0.7	3.9	-2.9	9.6	3.7				
% Change Year Ago	0.8	1.4	1.3	2.7	3.5	1.9	1.6	2.4	2.2
Private Consumption	0.4	2.5	0.5	1.5	0.3				
% Change Year Ago	3.2	5.2	6.8	5.0	4.9	1.0	5.0	2.7	5.5
Residential Investment	-0.4	-0.4	0.0	0.2	-0.3				
% Change Year Ago	6.1	2.0	0.2	-0.6	-0.6	4.0	1.8	6.3	0.2
Nonresidential Investment	0.5	3.5	2.7	2.0	0.5				
% Change Year Ago	3.2	4.5	8.5	9.0	9.1	2.4	6.4	4.7	7.7
Government Consumption	1.1	0.2	1.5	0.4	0.4				
% Change Year Ago	4.5	2.2	1.8	3.3	2.6	4.0	2.9	4.5	2.5
Public Investment	-2.0	2.2	1.8	-0.5	-0.3				
% Change Year Ago	-7.6	-4.3	-0.5	1.4	3.2	0.4	-2.8	-3.3	0.3
Exports of Goods & Services	4.2	8.0	5.4	-0.3	0.2				
% Change Year Ago	15.6	18.6	22.6	18.3	13.8	19.3	18.8	22.8	18.3
Imports of Goods & Services	8.2	11.8	12.0	-3.7	-2.6				
% Change Year Ago	32.6	35.9	45.2	30.5	17.4	20.7	36.0	30.1	31.7
Gross National Income	0.5	1.1	-0.3	1.7	0.9				
SAAR	2.1	4.4	-1.2	6.9	3.8				
% Change Year Ago	2.5	2.2	2.6	3.0	3.4	3.1	2.6	4.1	2.8
Memo:									
Total Demand	1.5	2.9	1.8	1.0	0.2				
SAAR	6.3	12.2	7.3	4.1	0.7				
% Change Year Ago	0.0	26.4	8.4	7.5	6.0	0.0	4.5	0.0	6.2
Compensation of Employees	0.9	0.6	0.3	0.1	0.1				
% Change Year Ago	1.0	2.1	1.9	1.9	1.1	2.0	1.8	2.1	1.8

Table 3-3: Deflator : 2015=100

	Quarterly		Forecast			CY		FY	
	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2021	2022	2021	2022
GDP/GDE									
Gross Domestic Products	102.0	101.9	101.3	103.1	104.0	101.7	102.1	101.8	102.6
Private Consumption	103.9	104.7	105.1	106.2	106.4	102.1	105.0	102.6	105.6
Residential Investment	116.7	118.5	119.1	118.4	117.2	110.7	118.2	113.3	118.3
Nonresidential Investment	104.6	106.1	107.4	108.8	109.5	102.5	106.7	103.3	108.0
Government Consumption	101.6	101.0	102.5	102.9	102.8	100.5	102.0	101.0	102.3
Public Investment	109.9	111.6	112.5	112.2	112.0	106.9	111.6	108.0	112.1
Exports of Goods & Services	104.0	110.8	114.4	115.6	115.9	97.4	111.2	99.9	114.2
Imports of Goods & Services	115.5	127.7	136.0	133.5	129.9	101.3	128.2	106.8	131.8
Unit Profit	104.5	104.7	103.0	107.3	109.2	104.7	104.9	104.7	106.0
Unit Labor Cost	100.0	99.5	100.0	99.5	99.7	99.2	99.7	99.3	99.7
Upper Row: % change from the previous quarter Lower Row: % change from a year earlier									
Gross Domestic Products	0.6	-0.2	-0.5	1.7	0.9				
	0.2	0.0	-0.4	1.7	2.0	-0.3	0.4	-0.2	0.8
Private Consumption	1.5	0.8	0.4	1.0	0.2				
	2.2	2.6	2.8	3.7	2.4	0.6	2.8	1.2	2.9
Residential Investment	1.4	1.5	0.5	-0.6	-1.0				
	9.6	9.0	5.9	2.8	0.4	5.2	6.7	7.5	4.4
Nonresidential Investment	0.9	1.5	1.2	1.3	0.6				
	3.3	4.0	4.5	5.0	4.7	1.7	4.2	2.6	4.6
Government Consumption	0.6	-0.5	1.4	0.4	0.0				
	1.7	0.7	1.5	1.8	1.2	0.5	1.5	1.1	1.3
Public Investment	1.1	1.5	0.8	-0.3	-0.2				
	4.2	5.2	4.8	3.2	1.9	2.4	4.3	3.3	3.8
Exports of Goods & Services	2.9	6.5	3.3	1.0	0.3				
	10.6	15.3	16.3	14.4	11.4	6.8	14.2	9.4	14.3
Imports of Goods & Services	4.4	10.6	6.5	-1.8	-2.7				
	23.6	31.0	31.3	20.7	12.5	14.9	26.5	21.5	23.5
Unit Profit	0.0	0.2	-1.6	4.2	1.8				
	0.0	4.3	-1.1	2.6	4.5	-0.3	0.2	0.2	1.3
Unit Labor Cost	0.0	-0.5	0.5	-0.5	0.1				
	0.0	13.5	0.3	0.9	-0.3	-0.2	0.6	-0.4	0.3