# Japanese Economy Monthly Forecast

# December 2023

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#### Headlines

#### Review of latest official data

► The current forecast is primarily based on data released in December 2023. Apart from household consumption-related indicators, public works, and the balance of payments, almost two-thirds of the basic monthly data required for an accurate Q4 GDP estimate are now available.

▶ In the second official advance GDP estimate for 2023 Q3, the real GDP growth rate was revised down from the first estimate. Although 2023 Q3 real GDP growth turned negative for the first time in four quarters, Japan's real GDP exceeded its pre-pandemic peak for the third consecutive quarter.

► The November production index fell-0.9% MoM, marking the first decline in three months. Nevertheless, the October-November average rose +0.9% over the 2023 Q3 average. METI's assessment of the economy ("steady growth") remained unchanged from the previous month.

Comparing the October-November average with the 2023 Q3 average, planned construction expenditures increased by +1.5%, while the shipments of capital goods decreased by -0.5%. In October, the real total consumption trend index increased slightly by +0.1% relative to the 2023 Q3 average, whereas public works decreased -1.3%.

Comparing the October-November average with the 2023 Q3 average, real exports fell -1.2% while real imports rose +0.3%. The contribution of real net exports of goods to real GDP growth was negative.

#### <u>2023 Q4 real GDP growth forecast update</u>

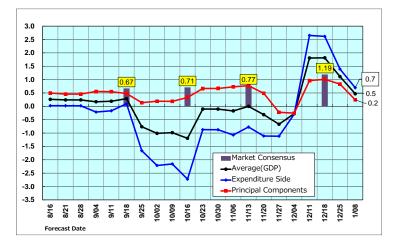
▶ APIR's expenditure-side CQM forecast for real GDP growth in 2023 Q4 is an annualized +0.7% QoQ. On the other hand, the production-side forecast figure is an annualized +0.2%. The average of the two forecasts is an annualized +0.5%, which is lower than the market consensus forecast of +1.19% (Figure 1).

#### • 2023 Q4 inflation forecast update

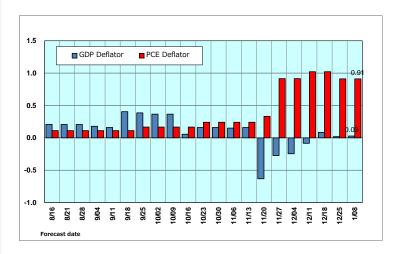
▶ In November, the nation-wide core CPI rose by +2.5%, marking the 27<sup>th</sup> month of inflation. Core CPI inflation remained in the 2-percent rage for the third month in a row.

▶ Our CQM forecasts for the private final consumption expenditure deflator and the domestic demand deflator in 2023 Q3 are respectively +0.9% and +0.6% QoQ. However, since the terms of trade are expected to deteriorate, we forecast a headline inflation (GDP deflator) of +0.0% QoQ (Figure 2).

# Fig 1 CQM Forecast: Real GDP Growth Rate Oct-Dec (Q4) 2023 (%, QoQ annualized growth)



#### Fig 2 CQM Forecast: Inflation Oct-Dec (Q4) 2023 (%, 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.

Release	Data	Francesta in dianta	Value/	Cha	inge
Date	Month	Economic Indicator	Index Score	МоМ	YoY
1/5	December	Food Balance (billion JPY)	+64.5		+5.1
	December	New Car Sales (vehicles)	301,571		+6.1%
	December	Consumer Confidence Index (SA)	37.2	+1.1	
12/28	November	Indices of Industrial Production (preliminary figures, 2020=100)			
		Production	104.0	-0.9%	
		Shipments	102.5	-1.3%	
		Inventories	104.3	+0.1%	
	November	Current Survey of Commerce (preliminary figures)			
		Retail trade (billion JPY)	13,819.0	+1.0%	+5.3%
	November	Producer Price Index for Intermediate and Final Demand (2015=100)			
		Capital goods	107.8		+3.6%
		Consumer goods	112.2		+0.8%
12/27	November	New Housing Starts			
		New housing starts (SA, Unit)	66,238	-4.0%	-8.5%
		Planned residential construction expenditure (billon JPY)	1,274.6	-9.2%	+0.2%
	October	Construction Costs Deflator (2015=100)			
		Housing construction	123.6		+1.1%
		Public works	122.7		+2.9%
12/26 N	November	Labor Force Survey			
		Total employment (millions)	67.75	+0.26	
		Total unemployment (millions)	1.77	+0.02	
		Unemployment rate (%)	2.5%	0.0%pt	
	November	General Job Placement Situation			
		Job offers-to-applicants ratio	1.28	-0.02%pt	
	November	Corporate Services Price Index (2015=100)			
		Overall index	110.2		+2.3%
12/25	October	Index of Business Conditions (revised, 2020=100)			
		Leading indicators	108.9	-0.4	
		Coincident indicators	115.9	+0.2	
		Lagging indicators	106.3	-0.1	
12/22	October	Monthly Labor Statistics (final figures)			
		Gross average salary per worker (JPY)	279,232		+1.5%
		Total working hours	138.3		+0.8%
	November	National Consumer Price Index (2020=100)			
		Core index	106.4	+0.1%	+2.5%
12/20	November	Trade Statistics (customs clearance level)			
		Trade balance (billion JPY)	-776.9	-18.4%	-62.29
		Exports (billion JPY)	8,819.6	-1.8%	-0.2%
		Imports (billion JPY)	9,596.5	-2.7%	-11.99
12/18	October	General Construction Statistics			
		Private non-residential construction (billion JPY)	967.2		-1.7%
		Public works (billion JPY)	2,058.7		+3.4%

# Table 1: Main Economic Indicators (latest)

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12/15	October	Tertiary Industry Activity Index (2015=100)	100.4	-0.8%	
	November	Public Works Advanced Securities Statistics			
		Contract amount (billion JPY)	764.7		+9.9%
		Number of contracts	17,831		+0.7%
12/14	October	Indices of Industrial Production (final figures, 2020=100)			
		Production	104.9	+1.3%	
		Shipments	103.8	+0.4%	
		Inventory	104.2	+0.6%	
		Production capacity index	98.5		+0.2%
		Capacity utilization ratio	108.2	+1.5%	
	October	Private Core Machinery Orders (billion JPY)	858.7	+0.7%	
12/12	November	Domestic Corporate Price Index (2020=100)			
		Corporate Price	119.5	+0.2%	+0.3%
		Export Price	136.9	+0.2%	+4.7%
		Import Price	167.6	+1.0%	-6.1%
12/8	October	Monthly Labor Statistics (preliminary figures)			
		Gross average salary per worker (JPY)	279,172		+1.5%
		Total working hours	138.2		+0.7%
	October	Family Income and Expenditure Survey (households with 2 or more people)			
		Nominal consumption expenditure (JPY)	301,974	+0.9%	+1.3%
		Real consumption expenditure		-0.1%	-2.5%
	October	Consumption Trend Index (2020=100)	103.3	+0.1%	
	October	Information Services Industry Sales (billion JPY)	1,207.3		+3.7%
	November	Economy Watchers Survey			
		Current Conditions Diffusion Index	49.5	0.0	
		Business Outlook Diffusion Index	49.4	+1.0	
	October	Balance of Payments			
		Current account (billion JPY)	2,582.8	+30.4%	+2,731.
		Exports (billion JPY)	9,106.6	+6.2%	+1.0%
		Imports (billion JPY)	9,579.5	+2.3%	-12.1%
12/7	October	Consumption Activity Index (2015=100)	97.5	+0.5%	
	October	Index of Business Conditions (preliminary figures, 2020=100)			
		Leading indicators	108.7	-0.6	
		Coincident indicators	115.9	+0.2	
		Lagging indicators	106.3	-0.1	
12/5	November	Tokyo Region Consumer Price Index (2020=100)			
		Core	106.0	0.0%	+2.3%

	Real GDP			Deflat	tor		Real GDP		Deflator Real GDP			Deflator			
Forecast date	Expenditure side	Production side (PCA)	Average	GDP	PCE	Expenditure side	Production side (PCA)	Average	GDP	PCE	Expenditure side	Production side (PCA)	Average	GDP	PCE
dute			2023Q3				2023Q4						2024Q1		
		SAAR (%)		QoQ (	%)		SAAR (%)		QoQ	(%)		SAAR (%)		QoQ (	(%)
8/16			0.9	0.7	0.2	0.0	0.5	0.2	0.2	0.1					
8/21	1.3	7 0.3	0.5	0.7	0.4	0.0		0.2	0.2	0.1					
8/28			1.0	0.7	0.4	0.0	0.5	0.2	0.2	0.1					
9/04		6 0.2	0.9	0.7	0.4	-0.2	0.6	0.2	0.2	0.1					
9/08															
9/11			1.3	0.5	0.4			0.2	0.2	0.1					
9/18			0.9	0.8	0.4			0.3	0.4	0.1					
9/25			-0.2	0.8	0.5			-0.8	0.4	0.2					
10/02			-0.6	0.9	0.5			-1.0	0.4	0.2					
10/09			-0.3	0.9	0.5			-1.0	0.4	0.2					
10/16			-1.3	0.7	0.5			-1.2	0.1	0.2					
10/23			-0.8	0.8	0.5			-0.1	0.2	0.2					
10/30			-0.8	0.8	0.5			-0.1	0.2	0.2					
11/06				0.7	0.5			-0.2	0.2	0.2					
11/13			-0.8	0.7	0.5	-0.8	0.8	-0.0	0.2	0.2					
11/15		<u>l</u>		<u>0.5</u>	<u>0.5</u>										
11/20						-1.1		-0.3	-0.6	0.3			2.2	-0.9	-0.4
11/27						-1.1	-0.2	-0.7	-0.3	0.9	2.2		2.1	-0.9	-0.4
12/04						-0.3	-0.3	-0.3	-0.2	0.9	2.2	2.2	2.2	-0.9	-0.4
12/08		*		0.7*	0.6*										
12/11						2.7		1.8	-0.1	1.0			1.6	-1.0	-0.4
12/18						2.6		1.8	0.1	1.0			1.5	-0.7	-0.4
12/25						1.4		1.1	0.0	0.9			0.7	-0.8	-0.5
1/08						0.7	0.2	0.5	0.0	0.9	-0.4	0.7	0.1	-0.7	-0.5

# Table 2: CQM Forecast: GDP Tracking

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	
	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2022	2023	2022	2023
GDP/GDE								_	
Gross Domestic Products	557,430	562,338	558,240	559,212	558,583	548,362	559,305	551,814	559,593
Private Consumption	300,070	298,203	297,754	298,234	298,611	295,859	298,565	298,122	298,201
Residential Investment	18,414	18,727	18,627	18,591	18,557	18,346	18,590	18,289	18,625
Nonresidential Investment	91,022	89,819	89,416	88,958	88,339	88,623	89,803	89,874	89,133
Change in Private Inventory	4,885	3,537	1,255	261	1,443	2,927	2,485	3,025	1,624
Government Consumption	119,855	119,786	120,179	120,478	120,988	118,857	120,075	119,334	120,358
Public Investment	26,275	26,665	26,453	26,338	26,508	25,807	26,433	25,853	26,491
Change in Public Inventory	72	-18	-13	101	71	22	36	37	35
Net Exports	-3,128	4,609	4,171	5,853	3,668	-1,372	2,876	-1,936	4,575
Exports of Goods & Services	107,227	111,338	111,742	112,228	110,425	108,215	110,634	108,774	111,433
Imports of Goods & Services	110,354	106,729	107,571	106,376	106,757	109,587	107,758	110,711	106,858
Gross National Income	572,476	583,850	580,339	572,626	571,346	564,725	577,323	567,147	577,040
Memo:	0.2,0	000,000	000,000	0.2,020	01 1,0 10	00.1,120	011,020		011,010
Total Demand	667,785	669,067	665,811	665,588	665,340	657,949	667,063	662,525	666,451
						001,010		002,020	
	Upper Row	: % chang	e from the	previous qu	arter Low	er Row: %	change fro	m a vear ea	rlier
Gross Domestic Products	1.2	0.9	-0.7	0.2	-0.1				
SAAR	5.0	3.6	-2.9	0.7	-0.4				
% Change Year Ago	2.5	2.3	1.6	1.6	0.2	1.0	2.0	1.5	1.4
Private Consumption	0.9	-0.6	-0.2	0.2	0.1				
% Change Year Ago	3.0	0.4	0.1	0.3	-0.5	2.2	0.9	2.7	0.0
Residential Investment	0.3	1.7	-0.5	-0.2	-0.2		0.0		0.0
% Change Year Ago	-1.2	3.1	2.2	1.3	0.8	-3.5	1.3	-3.4	1.8
Nonresidential Investment	1.8	-1.3	-0.4	-0.5	-0.7	0.0		0	
% Change Year Ago	4.9	1.4	-0.8	-0.6	-2.9	1.9	1.3	3.4	-0.8
Government Consumption	0.2	-0.1	0.3	0.2	0.4			0	0.0
% Change Year Ago	1.6	0.8	1.0	0.7	0.9	1.7	1.0	1.4	0.9
Public Investment	1.9	1.5	-0.8	-0.4	0.6				
% Change Year Ago	0.9	4.5	2.5	2.2	0.9	-9.6	2.4	-6.1	2.5
Exports of Goods & Services	-3.6	3.8	0.4	0.4	-1.6				
% Change Year Ago	2.2	3.9	2.0	0.9	3.0	5.3	2.2	4.7	2.4
Imports of Goods & Services	-1.5	-3.3	0.8	-1.1	0.4				
% Change Year Ago	4.1	-0.8	-4.7	-5.1	-3.3	7.9	-1.7	7.1	-3.5
Gross National Income	0.5	2.0	-0.6	-1.3	-0.2				
SAAR	2.1	8.2	-2.4	-5.2	-0.9				
% Change Year Ago	1.5	3.5	3.1	0.6	-0.2	-0.1	2.2	0.4	1.7
Total Demand	0.8	0.2	-0.5	0.0	0.0	0.1			
SAAR	3.1	0.2	-1.9	-0.1	-0.1				
% Change Year Ago	0.0	15.0	0.5	0.4	-0.4	2.0	1.4	2.4	0.6
		10.0	0.0	0.1	0.1	2.0		2.7	0.0
		-0.7	-0.6	-0.1	0.3	1.5	10	20	0.0
									-0.3
									0.3
									1.4
Contribution to GDP Grow th Ra Domestic Demand Private Demand Public demand Net Exports	ate 1.6 1.4 0.1 -0.3	-0.7 -0.8 0.0 1.6	-0.6 -0.6 0.0 -0.1	-0.1 -0.2 0.1 0.3	0.3 0.2 0.1 -0.4	1.5 1.6 -0.2 -0.5	1.0 0.7 0.3 1.0	2.0 2.0 0.0 -0.5	ם- כ

	Quarterly			Forecast		CY		FY	
	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2022	2023	2022	2023
GDP/GDE									
Gross Domestic Products	580,081	595,066	594,998	596,150	591,509	559,710	591,574	566,490	594,431
Private Consumption	322,456	322,077	323,427	326,907	325,752	311,063	323,717	315,849	324,541
Residential Investment	21,897	22,200	22,085	21,984	21,930	21,780	22,042	21,800	22,050
Nonresidential Investment	98,996	98,635	99,167	99,378	99,395	94,591	99,044	96,891	99,144
Change in Private Inventory	3,821	5,225	1,254	-62	1,034	3,596	2,560	3,617	1,863
Government Consumption	123,872	123,395	124,212	124,794	125,312	120,881	124,068	122,092	124,428
Public Investment	30,005	30,713	30,685	30,609	30,474	28,944	30,503	29,278	30,620
Change in Public Inventory	110	-11	-18	106	82	-96	47	-64	40
Net Exports	-21,076	-7,166	-5,812	-7,566	-12,470	-21,047	-10,405	-22,973	-8,254
Exports of Goods & Services	120,548	125,666	129,504	133,553	131,806	120,571	127,318	123,245	130,132
Imports of Goods & Services	141,624	132,832	135,316	141,119	144,276	141,618	137,723	146,218	138,386
Gross National Income	611,694	629,667	628,688	623,677	620,151	593,729	623,431	600,558	625,545
Memo:	011,004	023,007	020,000	020,017	020,101	000,720	020,401	000,000	020,040
Total Demand	721,705	727,898	730,314	737,269	735,784	701,328	729,297	712,707	732,816
Compensation of Employee	297,597	300,408	300,390	301,683	301,498	294,492	300,020	295,376	300,995
compensation of Employee	231,331	500,400	300,330	301,003	301,430	234,432	300,020	233,370	500,335
	Linnor Pou	v:% chong	o from thou	arovious qu	artor Low	er Row : %	chango fro	ma yoar oa	rlior
Gross Domestic Products	2.2	2.6	0.0	0.2	-0.8		change 110	illa yeai ea	
SAAR	9.3	10.7	0.0 0.0	0.2 0.8	-0.8 - <b>3.1</b>				
% Change Year Ago	4.6	6.3	6.7	5.1	2.0	1.3	5.7	2.3	4.9
Private Consumption	2.1	-0.1	0.4	1.1	-0.4	1.5	5.7	2.5	4.9
% Change Year Ago	6.3	-0.1	3.2	3.5	-0.4	5.1	4.1	5.9	2.8
Residential Investment	-0.1	1.4	-0.5	-0.5	-0.2	5.1	4.1	5.9	2.0
	-0.1	2.7	-0.5	-0.3	-0.2	3.4	1.2	1.5	1.1
% Change Year Ago Nonresidential Investment	2.0	-0.4	0.5	0.3	0.2	3.4	1.2	1.5	1.1
	8.9	-0.4	2.4	0.2 2.4	0.0	6.2	4.7	7.8	2.3
% Change Year Ago Government Consumption	0.6	-0.4	0.7	2.4 0.5	0.4	0.2	4.7	1.0	2.3
	3.9	-0.4	1.9	0.5 1.4	1.2	2.9	2.6	2.8	1.9
% Change Year Ago Public Investment						2.9	2.0	2.0	1.9
	2.3	2.4	-0.1	-0.2	-0.4	F 0	<b>F</b> 4	47	1.0
% Change Year Ago	4.5	7.6	5.5	4.4	1.6	-5.2	5.4	-1.7	4.6
Exports of Goods & Services	-5.8	4.2	3.1	3.1	-1.3	00.4	5.0	40.7	5.0
% Change Year Ago	9.9	5.6	3.3	4.4	9.3	20.4	5.6	18.7	5.6
Imports of Goods & Services	-5.9	-6.2	1.9	4.3	2.2	07.4	0.0	00.0	<b>5</b> 4
% Change Year Ago	15.3	-4.2	-12.1	-6.3	1.9	37.4	-2.8	32.3	-5.4
Gross National Income	1.0	2.9	-0.2	-0.8	-0.6				
SAAR	3.9	12.3	-0.6	-3.2	-2.2				1.0
% Change Year Ago	4.2	6.5	6.1	2.9	1.4	2.5	5.0	3.1	4.2
Memo:									
Total Demand	0.5	0.9	0.3	1.0	-0.2				
SAAR	2.1	3.5	1.3	3.9	-0.8			-	
% Change Year Ago	0.0	32.4	2.6	2.7	2.0	0.0	7.0	0.0	7.3
Compensation of Employee	0.5	0.9	0.0	0.4	-0.1				
% Change Year Ago	1.5	2.4	1.9	1.8	1.3	2.0	1.9	2.0	1.9

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

	Quarterly			Forecast		CY		FY	
	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2022	2023	2022	2023
GDP/GDE									
Gross Domestic Products	104.1	105.8	106.6	106.6	105.9	102.1	105.8	102.6	106.2
Private Consumption	107.5	108.0	108.6	109.6	109.1	105.1	108.4	105.9	108.8
Residential Investment	118.9	118.6	118.6	118.3	118.2	118.7	118.6	119.2	118.4
Nonresidential Investment	108.8	109.8	110.9	111.7	112.5	106.8	110.3	107.8	111.2
Government Consumption	103.4	103.0	103.4	103.6	103.6	101.7	103.3	102.3	103.4
Public Investment	114.2	115.2	116.0	116.2	115.0	112.2	115.4	113.1	115.6
Exports of Goods & Services	112.4	112.9	115.9	119.0	119.4	111.3	115.1	113.3	116.8
Imports of Goods & Services	128.3	124.5	125.8	132.7	135.1	129.0	127.8	132.0	129.5
Unit Profit	110.0	113.7	114.5	114.3	112.7	104.9	113.1	106.6	113.8
Unit Labor Cost	99.1	99.1	99.9	100.1	100.2	99.7	99.5	99.3	99.8
	Upper Row	: % change	e from the	previous qu	arter Low	er Row:%	change fro	m a year ea	rlier
Gross Domestic Products	1.0	1.7	0.7	0.0	-0.7				
	2.0	4.0	5.0	3.5	1.8	0.3	3.6	0.8	3.5
Private Consumption	1.2	0.5	0.6	0.9	-0.5				
	3.2	3.0	3.1	3.3	1.5	2.9	3.2	3.2	2.7
Residential Investment	-0.4	-0.3	0.0	-0.3	-0.1				
	1.7	-0.4	-0.8	-0.9	-0.6	7.2	-0.1	5.1	-0.7
Nonresidential Investment	0.2	1.0	1.0	0.7	0.7				
	3.8	3.3	3.2	3.0	3.5	4.2	3.3	4.3	3.2
Government Consumption	0.5	-0.3	0.3	0.2	0.0				
	2.3	2.5	0.9	0.7	0.2	1.2	1.6	1.3	1.1
Public Investment	0.4	0.9	0.7	0.2	-1.1				
	3.6	3.0	2.9	2.2	0.7	4.9	2.9	4.7	2.2
Exports of Goods & Services	-2.3	0.4	2.7	2.7	0.3				
	7.5	1.7	1.3	3.4	6.2	14.3	3.4	13.4	3.1
Imports of Goods & Services	-4.5	-3.0	1.1	5.5	1.9				
	10.7	-3.4	-7.7	-1.3	5.3	27.3	-0.9	23.6	-1.9
Unit Profit	0.0	3.4	0.7	-0.2	-1.4				
	0.0	13.3	10.3	6.9	2.5	-0.4	7.8	1.1	6.7
Unit Labor Cost	0.0	0.1	0.7	0.3	0.1				
	0.0	13.1	0.2	0.3	1.1	1.0	-0.1	0.5	0.5

# Table 3-3: Deflator : 2015=100