Japanese Economy Monthly Forecast

June 2023

Yoshihisa Inada Head of the Center for Quantitative Economic Analysis, APIR e-mail: inada-y@apir.or.jp

Headlines

<u>Review of latest official data</u>

► This forecast reflects data released by the end of June, including the second official advance GDP estimate for 2023 Q1. Except for household consumption-related indicators, public works, and balance of payments, about two-thirds of the basic monthly data required for the April-June GDP estimates have been updated.

► The main reason for the large upward revision in the second official advance estimate of Q1 GDP was the increase in private inventories. Final demand, however, remained almost unchanged from the first advance estimate. For this reason, the upward revision is not necessarily good news.

▶ In May, the Index of Industrial Production index declined -1.6% MoM, marking the first decline in four months. However, comparing the April-May average to the 2023 Q1 average, production rose by +1.2%. As a result, METI left its assessment of the economy ("gradual recovery") unchanged from the previous month.

Comparing the April-May average to the 2023 Q1 average, planned construction expenditure declined -0.1%. On the other hand, the index for shipments of capital goods increased +4.3%. Public works in April increased +2.4% over the Q1 average.

Comparing the April-May average to the 2023 Q1 average, real exports rose by +1.5%, while real imports declined by -0.9%. As a result, the contribution of net exports to real GDP growth was positive.

<u>2023 Q2 real GDP growth forecast update</u>

▷ Our expenditure-side CQM forecast for real GDP growth in 2023 Q2 is +1.3% QoQ, or an annualized +5.3%. Our forecast is considerably higher than the Market Consensus figure (Figure 1). On the other hand, real aggregate demand (domestic demand plus exports), which is a good indication of the actual state of the economy, is forecast to grow at an annualized +2.7%. Imports are declining, which is pushing up real GDP growth.

2023 Q2 inflation forecast update

▶ In May, the national core consumer price index (core CPI) rose for the 21st month in a row (+3.2% YoY). The core-core CPI rose +4.3%, marking the 14th consecutive month of inflation. Core-core CPI inflation exceeded core CPI inflation for the fourth consecutive month.

▶ Our CQM forecasts for the private final consumption expenditure deflator and the domestic demand deflator in 2023 Q2 are respectively +0.4% QoQ and +0.5% QoQ. However, since the terms of trade are expected to improve significantly, our headline inflation (GDP deflator) forecast is +1.4% QoQ (Figure 2).

Fig 1 CQM Forecast: Real GDP Growth Rate Apr-Jun (Q2) 2023 (%, QoQ annualized growth)

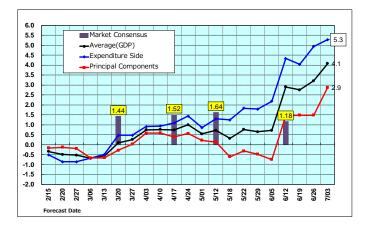
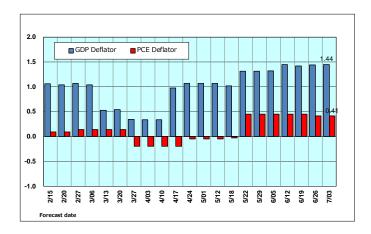


Fig 2 CQM Forecast: Inflation Apr-Jun (Q2) 2023 (%, QoQ growth)



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	Foonemia Indiastor	Value/ In-	Change		
Date	Month	Economic Indicator	dex Score	МоМ	YoY	
6/30	May	Labor Force Survey				
		Total employment (millions)	67.36	-0.08		
		Total unemployment (millions)	1.77	-0.03		
		Unemployment rate (%)	2.6%	0.0%pt		
	May	General Job Placement Situation				
		Job offers-to-applicants ratio	1.31	-0.01%pt		
	May	Indices of Industrial Production (preliminary figures, 2015=100)				
		Production	103.8	-1.6%		
		Shipments	103.9	-0.6%		
		Inventories	105.3	+1.5%		
	May	New Housing Starts				
		New housing starts (SA, Unit)	69,561	+11.8%	+3.5%	
		Planned residential construction expenditure (billon JPY)	1,338.2	+16.4%	+14.1%	
	April	Construction Costs Deflator (2015=100)				
		Housing construction	121.7		+1.2%	
		Public works	120.2		+3.0%	
	June	Tokyo Region Consumer Price Index (2020=100)				
		Core	104.8	+0.3%	+3.2%	
6/29	May	Current Survey of Commerce (preliminary figures)				
		Retail trade (billion JPY)	13,104.0	+1.3%	+5.7%	
	June	Consumer Confidence Index (SA)	36.2	+0.2		
6/28	May	Producer Price Index for Intermediate and Final Demand (2015=100)				
0/20		Capital goods	105.7		+4.2%	
		Consumer goods	110.0		+2.0%	
6/26	April	Index of Business Conditions (revised, 2015=100)				
		Leading indicators	96.8	0.0		
		Coincident indicators	97.3	+0.1		
		Lagging indicators	99.6	+0.5		
	May	Corporate Services Price Index (2015=100)				
		Overall index	108.5		+1.6%	
6/23	April	Monthly Labor Statistics (final figures)				
		Gross average salary per worker (JPY)	284,595		+0.8%	
		Total working hours	140.8		-0.5%	
	May	National Consumer Price Index (2020=100)				
	-	Core index	104.8	0.0%	+3.2%	
6/20	March	Indices of Industrial Production (final figures, 2020=100)				
		Production	105.5	+0.7%		
		Shipments	104.5	-0.2%		
		Inventory	103.7	-0.1%		
		Production capacity index	98.1		-0.2%	
		Capacity utilization ratio	111.1	+3.0%		
	March	General Construction Statistics		/ -		
		Private non-residential construction (billion JPY)	910.8		+8.0%	
		Public works (billion JPY)	1,507.7		+8.3%	

Table 1: Main Economic Indicators (latest)

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6/15	April	Tertiary Industry Activity Index (2015=100)	101.0	+1.2%	
	April	Private Core Machinery Orders (billion JPY)	900.0	+5.5%)	
	May	Public Works Advanced Securities Statistics			
		Contract amount (billion JPY)	1,416.3		+11.8%
		Number of contracts	16,487		+4.0%
	May	Trade Statistics (customs clearance level)			
	-	Trade balance (billion JPY)	-1,372.5	-24.9%	-42.0%
		Exports (billion JPY)	7,292.6	-3.1%	+0.6%
		Imports (billion JPY)	8,665.1	-5.6%	-9.9%
6/12	Мау	Domestic Corporate Price Index (2020=100)			
		Corporate Price	119.1	-0.7%	+5.1%
		Export Price	128.9	+1.7%	+2.0%
		Import Price	160.0	+2.2%	-5.4%
6/9	April	Information Services Industry Sales (billion JPY)	1,237.9		+9.5%
6/8	May	Economy Watchers Survey			
		Current Conditions Diffusion Index	55.0	+0.4	
		Future Conditions Diffusion Index	54.4	-1.3	
	April	Balance of Payments			
		Current account (billion JPY)	1,895.1	+88.3%	+76.3%
		Exports (billion JPY)	8,223.4	-4.1%	+2.6%
		Imports (billion JPY)	8,336.6	-2.9%	-4.1%
6/7	April	Index of Business Conditions (preliminary figures, 2015=100)			
		Leading indicators	97.6	+0.7	
		Coincident indicators	99.4	+0.2	
		Lagging indicators	101.2	+1.0	
	April	Consumption Activity Index (2015=100)	96.9	+0.1%	
6/6	April	Monthly Labor Statistics (preliminary figures)			
		Gross average salary per worker (JPY)	285,176		+1.0%
		Total working hours	141.0		-0.3%
	April	Family Income and Expenditure Survey (households with 2 or more people)			
		Nominal consumption expenditure (JPY)	303,076	-0.4%	-0.5%
		Real consumption expenditure		-1.3%	-4.4%
	April	Consumption Trend Index (2020=100)	104.0	+0.1%	
6/2	May	Food Buffer Stock (billion JPY)	-19.3		-7.2
6/1	May	New Car Sales (vehicles)	272,042		+28.4%

	Real GDP			Deflator			Real GDP		Deflator			Real GDP		Deflator	
Forecast date	Expenditur e side	Production side (PCA)	Average	GDP	PCE	Expenditur e side	Production side (PCA)	Average	GDP	PCE	Expenditur e side	Production side (PCA)	Average	GDP	PCE
duce			2023Q1					2023Q2					2023Q3		
		SAAR (%)		QoQ (%)		SAAR (%)		QoQ	(%)		SAAR (%)		QoQ	(%)
2/15	0.5	-2.4	-1.0	2.2	0.5	-0.5	-0.2	-0.3	1.1	0.1					
2/20	-0.4	-4.0	-2.2	2.2	0.5	-0.9	-0.1	-0.5	1.0	0.1					
2/27		-4.5	-2.4	2.4	0.9			-0.5	1.1	0.1					
3/06		-5.1	-3.2	2.4	0.9	-0.7	-0.7	-0.7	1.0	0.1					
3/09															
3/13	-3.0	-5.4	-4.2	2.3	0.9	-0.5	-0.7	-0.6	0.5	0.1					
3/20	-0.4	-4.3	-2.3	2.4	0.9	0.5	-0.3	0.1	0.5	0.1					
3/27		-3.7	-2.0	2.0	0.3	0.5		0.2	0.3	-0.2					
4/03		-1.2	-0.8	2.0	0.3			0.7	0.3	-0.2					
4/10	-0.5	-0.4	-0.5	2.0	0.3	0.9	0.6	0.8	0.3	-0.2					
4/17	-1.1	-0.6	-0.8	2.1	0.3	1.1	0.4	0.7	1.0	-0.2					
4/24	0.1	-0.7	-0.3	2.2	0.4	1.4	0.6	1.0	1.1	-0.0					
5/01	0.5	-0.2	0.1	2.2	0.4	0.9	0.2	0.5	1.1	-0.0					
5/12	0.5	-0.7	-0.1	2.2	0.4	1.3	0.1	0.7	1.1	-0.0					
5/17	<u>1.6</u>			<u>1.3</u>	<u>1.1</u>										
5/18						1.2	-0.6	0.3	0.0	0.0	3.1	-0.5	1.3	0.4	0.0
5/22						1.8	-0.3	0.8	1.0	-0.0	3.4	-0.5	1.4	0.4	0.1
5/29						1.8	-0.5	0.7	1.3	0.4	3.3	-0.6	1.4	0.4	0.1
6/05						2.2	-0.7	0.7	1.3	0.4	2.7	-0.2	1.2	0.4	0.1
6/08	2.7*			1.3*	1.2*										
6/12						4.3	1.5	2.9	1.4	0.4	2.1	-0.0	1.0	0.4	0.1
6/19						4.0	1.5	2.8	1.4	0.4	1.2	0.1	0.7	0.1	0.1
6/26						4.9	1.5	3.2	1.4	0.4	-0.1	-0.1	-0.1	0.2	0.1
7/03						5.3	2.9	4.1	1.4	0.4	1.7	0.1	0.9	0.1	0.1

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	
	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2022	2023	2021	2022
GDP/GDE									
Gross Domestic Products	546,741	547,307	551,001	558,139	560,545	545,956	557,307	541,037	548,537
Private Consumption	294,919	295,556	297,091	297,094	297,584	293,793	297,435	288,680	295,644
Residential Investment	17,794	17,814	17,803	18,067	18,335	17,924	18,180	18,649	17,823
Nonresidential Investment	90,149	89,625	90,861	92,820	93,050	88,757	92,555	87,181	89,927
Change in Private Inventory	2,904	717	2,658	2,209	2,942	2,448	2,023	1,196	2,393
Government Consumption	118,976	119,189	119,328	119,626	120,133	118,818	119,932	117,817	119,111
Public Investment	26,699	26,703	27,112	27,368	27,765	26,527	27,445	27,563	26,749
Change in Public Inventory	-255	-35	-80	-194	-183	-103	-160	-67	-107
Net Exports	-3,774	-1,501	-3,647	1,276	1,044	-1,596	23	499	-2,327
Exports of Goods & Services	109,221	111,447	106,714	108,852	107,818	108,069	107,975	103,884	108,454
Imports of Goods & Services	112,996	112,949	110,361	107,576	106,773	109,664	107,952	103,385	110,781
Gross National Income	561,388	566,727	566,983	574,768	578,404	563,358	574,262	562,417	565,254
Memo:									
Total Demand	659,737	660,256	661,362	665,715	667,318	655,620	665,259	644,421	659,318
			· · · ·						
	Upper Row	: % chang	e from the	previous qu	arter Low	er Row : %	change froi	m a year ea	rlier
Gross Domestic Products	-0.4	0.1	0.7	1.3	0.4				
SAAR	-1.5	0.4	2.7	5.3	1.7				
% Change Year Ago	1.6	0.4	1.8	1.7	2.5	1.0	2.1	2.6	1.4
Private Consumption	0.1	0.2	0.5	0.0	0.2				
% Change Year Ago	3.7	0.8	2.5	0.8	0.9	2.0	1.2	1.5	2.4
Residential Investment	-0.5	0.1	-0.1	1.5	1.5				
% Change Year Ago	-5.2	-3.9	-2.2	1.0	3.0	-4.6	1.4	-1.1	-4.4
Nonresidential Investment	1.5	-0.6	1.4	2.2	0.2				
% Change Year Ago	4.0	2.8	4.5	4.5	3.2	1.8	4.3	2.1	3.1
Government Consumption	0.0	0.2	0.1	0.2	0.4				
% Change Year Ago	0.3	1.6	1.0	0.6	1.0	1.5	0.9	3.4	1.1
Public Investment	0.9	0.0	1.5	0.9	1.5				
% Change Year Ago	-5.2	-2.2	3.2	3.5	4.0	-7.0	3.5	-6.4	-3.0
Exports of Goods & Services	2.5	2.0	-4.2	2.0	-1.0				
% Change Year Ago	5.8	7.4	1.6	2.1	-1.3	5.1	-0.1	12.4	4.4
Imports of Goods & Services	5.6	0.0	-2.3	-2.5	-0.7				
% Change Year Ago	10.9	10.5	4.1	0.5	-5.5	8.0	-1.6	7.1	7.2
Gross National Income	-0.7	1.0	0.0	1.4	0.6				
SAAR	-2.7	3.9	0.2	5.6	2.6				
% Change Year Ago	0.4	0.6	1.0	1.7	3.0	0.2	1.9	2.2	0.5
Total Demand	0.6	0.1	0.2	0.7	0.2				
SAAR	2.5	0.3	0.7	2.7	1.0				
% Change Year Ago	0.0	13.5	2.2	1.5	1.1	2.1	1.5	3.3	2.3
Contribution to GDP Grow th Ra		10.0				2.1	1.0	0.0	2.0
Domestic Demand	0.3	-0.3	1.0	0.4	0.5	1.6	1.7	1.8	1.9
Private Demand	0.0	-0.4	0.9	0.4	0.3	1.0	1.4	1.4	1.9
Public demand	0.2	0.4	0.0	0.0	0.0	-0.1	0.4	0.4	0.1
Net Exports	-0.6	0.1	-0.3	0.9	0.0	-0.5	0.4	0.4	-0.5

	Quarterly Forecast			CY		FY			
	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2022	2023	2021	2022
GDP/GDE									
Gross Domestic Products	554,348	560,760	571,987	587,755	591,055	556,553	585,501	550,664	561,884
Private Consumption	310,113	312,921	318,236	319,555	320,253	308,448	319,772	296,323	312,640
Residential Investment	21,188	21,195	21,087	21,344	21,511	21,216	21,390	21,129	21,168
Nonresidential Investment	96,737	96,996	98,439	101,791	102,702	94,563	101,677	90,082	96,727
Change in Private Inventory	3,721	1,010	2,237	1,408	1,854	2,942	1,191	1,123	2,751
Government Consumption	121,970	122,612	123,271	124,119	124,657	121,198	124,303	118,968	121,951
Public Investment	30,105	30,282	30,746	31,353	31,323	29,688	31,171	29,807	30,206
Change in Public Inventory	-865	-11	-25	-309	-300	-254	-234	-90	-247
Net Exports	-28,620	-24,245	-22,005	-11,507	-10,945	-21,249	-13,768	-6,679	-23,312
Exports of Goods & Services		128,058	119,296	122,371	121,510	120,233	121,323	103,819	122,700
Imports of Goods & Services		152,303			132,455	120,233	135,091	110,497	146,012
Gross National Income			141,302	133,878		-			
	589,981	600,494	604,770	617,635	621,708	591,605	616,419	579,692	597,268
Memo:	700.054	740.000	740.000	704 000	700 540	000.005	700 500	004 404	707.000
Total Demand	708,051	713,063	713,289	721,633	723,510	698,035	720,592	661,161	707,896
Compensation of Employee	294,880	296,164	296,550	297,723	298,104	294,492	297,622	289,508	295,376
		0/ 1	6 11			D 0/			r.
				previous qu		er Row:%	change froi	m a year ea	rlier
Gross Domestic Products	-0.9	1.2	2.0	2.8	0.6				
SAAR	-3.6	4.7	8.3	11.5	2.3				
% Change Year Ago	1.2	1.6	3.5	5.1	6.6	1.3	5.2	2.4	2.0
Private Consumption	0.4	0.9	1.7	0.4	0.2				
% Change Year Ago	6.7	4.4	5.6	3.4	3.3	4.9	3.7	2.7	5.5
Residential Investment	-0.1	0.0	-0.5	1.2	0.8				
% Change Year Ago	0.3	-0.6	-0.9	0.7	1.5	1.9	0.8	6.3	0.2
Nonresidential Investment	2.6	0.3	1.5	3.4	0.9				
% Change Year Ago	8.7	7.4	8.2	8.0	6.2	5.9	7.5	4.7	7.4
Government Consumption	1.6	0.5	0.5	0.7	0.4				
% Change Year Ago	1.8	3.4	2.5	3.4	2.2	3.0	2.6	4.5	2.5
Public Investment	1.9	0.6	1.5	2.0	-0.1				
% Change Year Ago	-0.5	2.1	6.7	6.1	4.0	-2.7	5.0	-3.3	1.3
Exports of Goods & Services	5.6	2.4	-6.8	2.6	-0.7				
% Change Year Ago	23.3	22.1	9.1	3.3	-2.9	20.0	0.9	23.0	18.2
Imports of Goods & Services	12.2	-0.9	-7.2	-5.3	-1.1				
% Change Year Ago	45.8	34.5	15.1	-2.2	-13.8	37.3	-4.5	30.3	32.1
Gross National Income	-0.4	1.8	0.7	2.1	0.7				
SAAR	-1.6	7.3	2.9	8.8	2.7				
% Change Year Ago	2.7	3.5	3.4	4.3	5.4	2.7	4.2	4.0	3.0
Memo:									
Total Demand	1.7	0.7	0.0	1.2	0.3				
SAAR	6.9	2.9	0.1	4.8	1.0				
% Change Year Ago	0.0	29.7	5.6	3.6	2.2	0.0	7.0	0.0	6.2
Compensation of Employee	0.3	0.4	0.1	0.4	0.1				
% Change Year Ago	2.0	2.5	1.4	1.3	1.1	2.0	1.1	2.1	2.0

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

	Quarterly			Forecast		CY		FY	
	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2022	2023	2021	2022
GDP/GDE									
Gross Domestic Products	101.4	102.5	103.8	105.3	105.4	101.9	105.1	101.8	102.4
Private Consumption	105.2	105.9	107.1	107.6	107.6	105.0	107.5	102.6	105.7
Residential Investment	119.1	119.0	118.5	118.1	117.3	118.4	117.7	113.3	118.8
Nonresidential Investment	107.3	108.2	108.3	109.7	110.4	106.6	109.8	103.3	107.5
Government Consumption	102.5	102.9	103.3	103.8	103.8	102.0	103.6	101.0	102.4
Public Investment	112.8	113.4	113.4	114.6	112.8	111.9	113.6	108.0	112.8
Exports of Goods & Services	114.5	114.9	111.8	112.4	112.7	111.2	112.4	99.9	113.1
Imports of Goods & Services	136.0	134.8	128.0	124.5	124.1	128.8	125.1	106.8	131.8
Unit Profit	103.0	104.9	108.5	112.8	113.4	104.2	112.1	104.7	105.4
Unit Labor Cost	100.1	100.4	99.9	99.0	98.7	100.1	99.1	99.3	99.9
	Upper Row	: % change	e from the	previous qu	arter Low	er Row:%	change fro	m a year ea	rlier
Gross Domestic Products	-0.5	1.1	1.3	1.4	0.1				
	-0.3	1.2	1.7	3.3	4.0	0.2	3.1	-0.2	0.6
Private Consumption	0.3	0.7	1.2	0.4	0.1				
	2.9	3.5	3.0	2.6	2.4	2.8	2.4	1.2	3.0
Residential Investment	0.4	-0.1	-0.4	-0.3	-0.7				
	5.8	3.4	1.4	-0.3	-1.5	6.9	-0.6	7.5	4.8
Nonresidential Investment	1.1	0.9	0.1	1.2	0.7				
	4.4	4.4	3.6	3.3	2.9	4.0	3.1	2.6	4.1
Government Consumption	1.6	0.4	0.4	0.4	0.0				
	1.5	1.8	1.5	2.8	1.2	1.4	1.6	1.1	1.4
Public Investment	1.0	0.6	0.0	1.0	-1.5				
	4.9	4.3	3.4	2.6	0.1	4.7	1.5	3.3	4.4
Exports of Goods & Services	3.1	0.3	-2.7	0.6	0.3				
	16.5	13.7	7.4	1.2	-1.6	14.1	1.1	9.5	13.2
Imports of Goods & Services	6.3	-0.9	-5.1	-2.8	-0.3				
	31.4	21.7	10.5	-2.8	-8.8	27.1	-2.9	21.6	23.4
Unit Profit	0.0	1.9	3.4	4.0	0.6				
	0.0	4.5	4.1	7.4	10.1	-0.5	7.6	0.2	0.7
Unit Labor Cost	0.0	0.3	-0.5	-0.9	-0.3				
	0.0	14.6	-0.4	-0.4	-1.4	0.9	-1.0	-0.5	0.6

Table 3-3: Deflator : 2015=100