



# Japanese Economy Monthly Forecast

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## Headlines

### ● Review of latest official data

▶ This forecast reflects data released through the first week of August. Apart from household consumption-related indicators, public works, and balance of payments statistics for June, most basic monthly data needed to estimate 2023 Q2 GDP are now available.

▶ In June, the index of industrial production increased MoM for the first time in two months. As a result, the Q2 index rose by +1.3% QoQ, marking the first QoQ increase in three quarters.

▶ Comparing the April-May averages of household consumption-related indicators with the Q1 averages, the Ministry of Internal Affairs and Communications' real gross consumption trend index remained unchanged (+0.0%). On the other hand, the Bank of Japan's consumption activity index declined -0.3%. Real private consumption remained sluggish in Q2.

▶ In 2023 Q2, planned construction expenditures for dwelling rose by +1.3% relative to the Q1 average, marking the second consecutive quarterly increase. The Q2 index for shipments of capital goods rose by +4.8% QoQ, marking the first increase in three quarters. Public works in April-May average expanded +3.7% over the Q1 average.

▶ In 2023 Q2, real exports increased by +2.7% relative to the Q1 average. On the other hand, real imports decreased by -1.1%. As a result, the contribution of net exports to real GDP growth was positive.

### ● 2023 Q2 real GDP growth forecast update

▶ APIR's CQM (expenditure side) forecast for real GDP growth in Q2 is +1.2% QoQ, or an annualized +5.0% QoQ. The forecast figure is considerably higher than the market consensus (see Figure 1). Final-demand (GDP excluding changes in inventories and net exports) is forecast to expand by +2.0% QoQ. The QoQ decline in imports made a positive contribution to real GDP growth in Q2.

### ● 2023 Q2 inflation forecast update

▶ In Q2, the CPI and the core CPI both rose for the seventh consecutive quarter, respectively by +3.4% and +3.2% YoY. The core-core CPI rose by +4.2%, marking the fifth consecutive quarterly increase.

▶ APIR's CQM forecasts for the private final consumption expenditure deflator and the domestic demand deflator are +0.5% and +0.6% QoQ, respectively. Meanwhile, as the terms of trade are expected to improve significantly, we forecast a headline (GDP deflator) inflation rate of +1.6% QoQ in Q2 (see Chart 2).

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

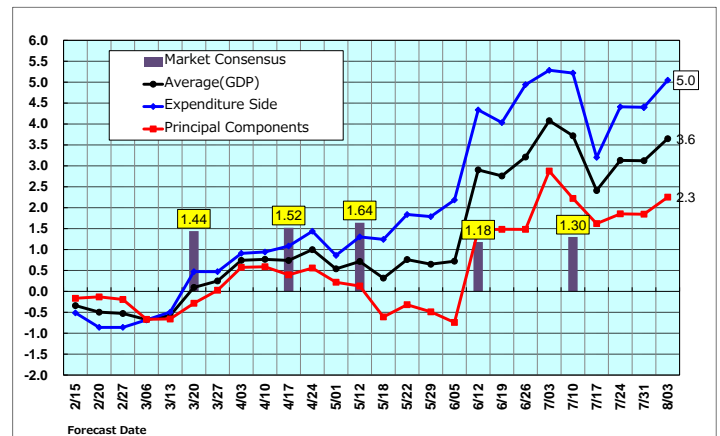
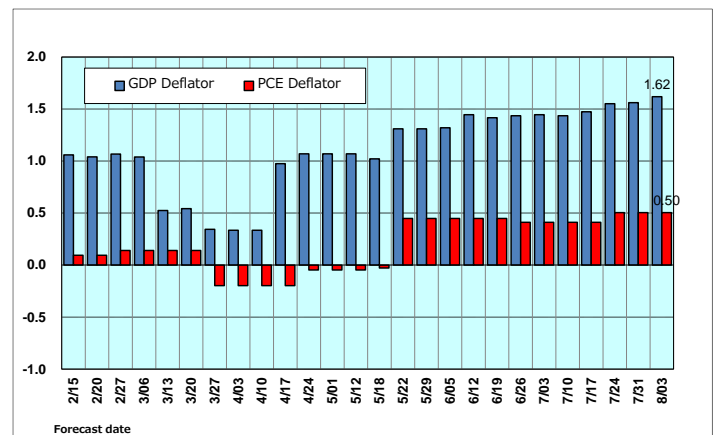


Fig 2 CQM Forecast: Inflation Apr-Jun (Q2) 2023 (% , QoQ growth)



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.

**Table 1: Main Economic Indicators (latest)**

Re-lease Date	Data Month	Economic Indicator	Value/ Index Score	Change		
				MoM	YoY	
8/2	July	<b>Food Buffer Stock (billion JPY)</b>	+12.2		+10.7	
8/1	July	<b>New Car Sales (vehicles)</b>	320,997		+11.4%	
7/31	June	<b>Labor Force Survey</b>				
		Total employment (millions)	67.55	+0.19		
		Total unemployment (millions)	1.73	-0.04		
	June	<b>General Job Placement Situation</b>	Unemployment rate (%)	2.5%	-0.1%pt	
			Job offers-to-applicants ratio	1.30	-	0.01%pt
	June	<b>Indices of Industrial Production (preliminary figures, 2020=100)</b>	Production	105.3	+2.0%	
			Shipments	104.8	+1.5%	
			Inventories	105.5	-0.1%	
	June	<b>Current Survey of Commerce (preliminary figures)</b>				
		Retail trade (billion JPY)	13,225.0	-0.4%	+5.9%	
	June	<b>New Housing Starts</b>	New housing starts (SA, Unit)	67,600	-5.9%	-4.8%
			Planned residential construction expenditure (billion JPY)	1,418.4	-3.2%	+11.4%
	May	<b>Construction Costs Deflator (2015=100)</b>	Housing construction	122.9		+2.6%
Public works			121.1		+3.8%	
	<b>Consumer Confidence Index (SA)</b>	37.1	+0.9			
7/28	May	<b>Producer Price Index for Intermediate and Final Demand (2015=100)</b>				
		Capital goods	105.8		+3.7%	
		Consumer goods	110.8		+2.1%	
	July	<b>Tokyo Region Consumer Price Index (2020=100)</b>				
		Core	105.1	+0.2%	+3.0%	
7/26	May	<b>Index of Business Conditions (revised, 2015=100)</b>				
		Leading indicators	109.2	+1.1		
		Coincident indicators	114.3	+0.1		
	Lagging indicators	106.9	+1.3			
June	<b>Corporate Services Price Index (2015=100)</b>					
	Overall index	108.4		+1.2%		
7/25	May	<b>Monthly Labor Statistics (final figures)</b>				
		Gross average salary per worker (JPY)	284,998		+2.9%	
		Total working hours	133.6		+2.0%	
7/21	June	<b>National Consumer Price Index (2020=100)</b>				
	Core index	105.0	+0.4%	+3.3%		
7/20	June	<b>Trade Statistics (customs clearance level)</b>				
		Trade balance (billion JPY)	43.0	-28.2%	+1,418.0	
		Exports (billion JPY)	8,744.1	+3.3%	+1.5%	
		Imports (billion JPY)	8,701.0	+0.5%	-12.9%	
7/18	May	<b>Tertiary Industry Activity Index (2015=100)</b>	102.0	+1.2%		

	May	<b>General Construction Statistics</b>			
		Private non-residential construction (billion JPY)	895.4		+6.2%
		Public works (billion JPY)	1,427.5		+9.6%
7/14	May	<b>Indices of Industrial Production (final figures, 2020=100)</b>			
		Production	103.2	-2.2%	
		Shipments	103.3	-1.1%	
		Inventory	105.6	+1.8%	
		Production capacity index	98.3		0.0%
		Capacity utilization ratio	104.1	-6.3%	
	June	<b>Public Works Advanced Securities Statistics</b>			
		Contract amount (billion JPY)	1,815.1		+9.9%
		Number of contracts	25,934		+3.7%
7/12	May	<b>Private Core Machinery Orders (billion JPY)</b>	831.5	-7.6%	
	June	<b>Domestic Corporate Price Index (2020=100)</b>			
		Corporate Price	119.0	-0.7%	+5.1%
		Export Price	130.3	+1.1%	+0.4%
		Import Price	157.9	-1.2%	-11.3%
7/10	May	<b>Information Services Industry Sales (billion JPY)</b>	1,155.2		+8.3%
	June	<b>Economy Watchers Survey</b>			
		Current Conditions Diffusion Index	53.6	-1.4	
		Future Conditions Diffusion Index	52.8	-1.6	
	May	<b>Balance of Payments</b>			
		Current account (billion JPY)	1,862.4	-10.4%	+140.8%
		Exports (billion JPY)	7,241.2	-6.1%	-2.8%
		Imports (billion JPY)	8,427.9	-4.7%	-10.2%
7/7	May	<b>Monthly Labor Statistics (preliminary figures)</b>			
		Gross average salary per worker (JPY)	283,868		+2.5%
		Total working hours	133.5		+1.9%
	May	<b>Family Income and Expenditure Survey (households with 2 or more people)</b>			
		Nominal consumption expenditure (JPY)	286,443	-1.0%	-0.4%
		Real consumption expenditure		-1.1%	-4.0%
	May	<b>Consumption Trend Index (2020=100)</b>	103.9	-0.1%	
	May	<b>Consumption Activity Index (2015=100)</b>	97.8	+0.8%	
	May	<b>Index of Business Conditions (preliminary figures, 2015=100)</b>			
		Leading indicators	109.5	+1.4	
		Coincident indicators	113.8	-0.4	
		Lagging indicators	105.5	+0.6	

**Table 2: CQM Forecast: GDP Tracking**

Forecast date	Real GDP			Deflator		Real GDP			Deflator		Real GDP			Deflator	
	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
	2023Q1			2023Q2			2023Q3			2023Q3			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	-0.4	-4.5	-2.4	2.4	0.9	-0.9	-0.2	-0.5	1.1	0.1					
3/06	-1.3	-5.1	-3.2	2.4	0.9	-0.7	-0.7	-0.7	1.0	0.1					
<b>3/09</b>															
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	-0.4	-3.7	-2.0	2.0	0.3	0.5	0.0	0.2	0.3	-0.2					
4/03	-0.3	-1.2	-0.8	2.0	0.3	0.9	0.6	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					
<b>5/17</b>	<b>1.6</b>			<b>1.3</b>	<b>1.1</b>										
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
<b>6/08</b>	<b>2.7*</b>			<b>1.3*</b>	<b>1.2*</b>										
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
7/10						5.2	2.2	3.7	1.4	0.4	1.8	0.1	0.9	0.1	0.1
7/17						3.2	1.6	2.4	1.5	0.4	1.4	-0.2	0.6	0.5	0.1
7/24						4.4	1.9	3.1	1.6	0.5	3.8	-0.0	1.9	0.6	0.3
7/31						4.4	1.8	3.1	1.6	0.5	3.8	-0.0	1.9	0.6	0.3
8/03						5.0	2.3	3.6	1.6	0.5	2.7	0.3	1.5	0.7	0.3

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	557,825	561,494	545,956	557,863	541,037	548,537
Private Consumption	294,919	295,556	297,091	296,998	297,529	293,793	297,378	288,680	295,644
Residential Investment	17,794	17,814	17,803	18,012	18,301	17,924	18,155	18,649	17,823
Nonresidential Investment	90,149	89,625	90,861	92,818	93,130	88,757	92,581	87,181	89,927
Change in Private Inventory	2,904	717	2,658	3,206	2,362	2,448	2,208	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	27,462	27,985	26,527	27,598	27,563	26,749
Change in Public Inventory	-255	-35	-80	-155	-133	-103	-124	-67	-107
Net Exports	-3,774	-1,501	-3,647	-16	2,313	-1,596	261	499	-2,327
Exports of Goods & Services	109,221	111,447	106,714	108,925	110,703	108,069	109,365	103,884	108,454
Imports of Goods & Services	112,996	112,949	110,361	108,941	108,390	109,664	109,103	103,385	110,781
Gross National Income	561,388	566,727	566,983	575,108	581,635	563,358	576,218	562,417	565,254
Memo:									
Total Demand	659,737	660,256	661,362	666,766	669,884	655,620	666,967	644,421	659,318
Upper Row : % change from the previous quarter Lower Row : % change from a year earlier									
Gross Domestic Products	-0.4	0.1	0.7	1.2	0.7				
<b>SAAR</b>	<b>-1.5</b>	<b>0.4</b>	<b>2.7</b>	<b>5.0</b>	<b>2.7</b>				
% Change Year Ago	1.6	0.4	1.8	1.7	2.7	1.0	2.2	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	1.2	1.6				
% Change Year Ago	-5.2	-3.9	-2.2	0.7	2.8	-4.6	1.3	-1.1	-4.4
Nonresidential Investment	1.5	-0.6	1.4	2.2	0.3				
% Change Year Ago	4.0	2.8	4.5	4.5	3.3	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	1.3	1.9				
% Change Year Ago	-5.2	-2.2	3.2	3.8	4.8	-7.0	4.0	-6.4	-3.0
Exports of Goods & Services	2.5	2.0	-4.2	2.1	1.6				
% Change Year Ago	5.8	7.4	1.6	2.2	1.4	5.1	1.2	12.4	4.4
Imports of Goods & Services	5.6	0.0	-2.3	-1.3	-0.5				
% Change Year Ago	10.9	10.5	4.1	1.8	-4.1	8.0	-0.5	7.1	7.2
Gross National Income	-0.7	1.0	0.0	1.4	1.1				
<b>SAAR</b>	<b>-2.7</b>	<b>3.9</b>	<b>0.2</b>	<b>5.9</b>	<b>4.6</b>				
% Change Year Ago	0.4	0.6	1.0	1.8	3.6	0.2	2.3	2.2	0.5
Total Demand	0.6	0.1	0.2	0.8	0.5				
<b>SAAR</b>	<b>2.5</b>	<b>0.3</b>	<b>0.7</b>	<b>3.3</b>	<b>1.9</b>				
% Change Year Ago	0.0	13.5	2.2	1.7	1.5	2.1	1.7	3.3	2.3
Contribution to GDP Growth Rate									
Domestic Demand	0.3	-0.3	1.0	0.6	0.2	1.6	1.8	1.8	1.9
Private Demand	0.2	-0.4	0.9	0.5	0.1	1.7	1.4	1.4	1.9
Public demand	0.0	0.1	0.1	0.1	0.2	-0.1	0.4	0.4	0.1
Net Exports	-0.6	0.4	-0.3	0.7	0.4	-0.5	0.4	0.8	-0.5

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	554,348	560,760	571,987	588,424	596,310	556,553	588,514	550,664	561,884	
Private Consumption	310,113	312,921	318,236	319,748	321,112	308,448	320,240	296,323	312,640	
Residential Investment	21,188	21,195	21,087	21,465	21,752	21,216	21,554	21,129	21,168	
Nonresidential Investment	96,737	96,996	98,439	101,791	102,781	94,563	101,696	90,082	96,727	
Change in Private Inventory	3,721	1,010	2,237	2,415	1,294	2,942	1,377	1,123	2,751	
Government Consumption	121,970	122,612	123,271	124,108	124,631	121,198	124,288	118,968	121,951	
Public Investment	30,105	30,282	30,746	31,745	31,947	29,688	31,587	29,807	30,206	
Change in Public Inventory	-865	-11	-25	-280	-263	-254	-207	-90	-247	
Net Exports	-28,620	-24,245	-22,005	-12,568	-6,945	-21,249	-12,021	-6,679	-23,312	
Exports of Goods & Services	125,082	128,058	119,296	122,518	124,789	120,233	122,923	103,819	122,700	
Imports of Goods & Services	153,703	152,303	141,302	135,086	131,734	141,482	134,944	110,497	146,012	
Gross National Income	589,981	600,494	604,770	618,607	627,244	591,605	619,663	579,692	597,268	
Memo:										
Total Demand	708,051	713,063	713,289	723,510	728,044	698,035	723,458	661,161	707,896	
Compensation of Employee	294,880	296,164	296,550	300,343	300,580	294,492	299,585	289,508	295,376	
	Upper Row : % change from the previous quarter					Lower Row : % change from a year earlier				
Gross Domestic Products	-0.9	1.2	2.0	2.9	1.3					
<b>SAAR</b>	<b>-3.6</b>	<b>4.7</b>	<b>8.3</b>	<b>12.0</b>	<b>5.5</b>					
% Change Year Ago	1.2	1.6	3.5	5.2	7.6	1.3	5.7	2.4	2.0	
Private Consumption	0.4	0.9	1.7	0.5	0.4					
% Change Year Ago	6.7	4.4	5.6	3.5	3.5	4.9	3.8	2.7	5.5	
Residential Investment	-0.1	0.0	-0.5	1.8	1.3					
% Change Year Ago	0.3	-0.6	-0.9	1.2	2.7	1.9	1.6	6.3	0.2	
Nonresidential Investment	2.6	0.3	1.5	3.4	1.0					
% 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	2.5	4.5	2.5	
Public Investment	1.9	0.6	1.5	3.2	0.6					
% Change Year Ago	-0.5	2.1	6.7	7.4	6.1	-2.7	6.4	-3.3	1.3	
Exports of Goods & Services	5.6	2.4	-6.8	2.7	1.9					
% Change Year Ago	23.3	22.1	9.1	3.5	-0.2	20.0	2.2	23.0	18.2	
Imports of Goods & Services	12.2	-0.9	-7.2	-4.4	-2.5					
% Change Year Ago	45.8	34.5	15.1	-1.4	-14.3	37.3	-4.6	30.3	32.1	
Gross National Income	-0.4	1.8	0.7	2.3	1.4					
<b>SAAR</b>	<b>-1.6</b>	<b>7.3</b>	<b>2.9</b>	<b>9.5</b>	<b>5.7</b>					
% Change Year Ago	2.7	3.5	3.4	4.4	6.3	2.7	4.7	4.0	3.0	
Memo:										
Total Demand	1.7	0.7	0.0	1.4	0.6					
<b>SAAR</b>	<b>6.9</b>	<b>2.9</b>	<b>0.1</b>	<b>5.9</b>	<b>2.5</b>					
% Change Year Ago	0.0	29.7	5.6	3.9	2.8	0.0	7.0	0.0	6.2	
Compensation of Employee	0.3	0.4	0.1	1.3	0.1					
% Change Year Ago	2.0	2.5	1.4	2.2	1.9	2.0	1.7	2.1	2.0	

Table 3-3: Deflator : 2015=100

	Quarterly			Forecast		CY		FY	
	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2022	2023	2021	2022
GDP/GDE									
Gross Domestic Products	101.4	102.5	103.8	105.5	106.2	101.9	105.5	101.8	102.4
Private Consumption	105.2	105.9	107.1	107.7	107.9	105.0	107.7	102.6	105.7
Residential Investment	119.1	119.0	118.5	119.2	118.9	118.4	118.7	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	103.7	102.0	103.6	101.0	102.4
Public Investment	112.8	113.4	113.4	115.6	114.2	111.9	114.5	108.0	112.8
Exports of Goods & Services	114.5	114.9	111.8	112.5	112.7	111.2	112.4	99.9	113.1
Imports of Goods & Services	136.0	134.8	128.0	124.0	121.5	128.8	123.7	106.8	131.8
Unit Profit	103.0	104.9	108.5	112.1	114.3	104.2	112.4	104.7	105.4
Unit Labor Cost	100.1	100.4	99.9	99.9	99.3	100.1	99.7	99.3	99.9
Upper Row : % change from the previous quarter Lower Row : % change from a year earlier									
Gross Domestic Products	-0.5	1.1	1.3	1.6	0.7				
	-0.3	1.2	1.7	3.5	4.7	0.2	3.5	-0.2	0.6
Private Consumption	0.3	0.7	1.2	0.5	0.3				
	2.9	3.5	3.0	2.7	2.6	2.8	2.6	1.2	3.0
Residential Investment	0.4	-0.1	-0.4	0.6	-0.3				
	5.8	3.4	1.4	0.5	-0.2	6.9	0.3	7.5	4.8
Nonresidential Investment	1.1	0.9	0.1	1.2	0.6				
	4.4	4.4	3.6	3.3	2.9	4.0	3.0	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	1.9	-1.2				
	4.9	4.3	3.4	3.5	1.2	4.7	2.3	3.3	4.4
Exports of Goods & Services	3.1	0.3	-2.7	0.6	0.2				
	16.5	13.7	7.4	1.3	-1.6	14.1	1.1	9.5	13.2
Imports of Goods & Services	6.3	-0.9	-5.1	-3.2	-2.0				
	31.4	21.7	10.5	-3.1	-10.7	27.1	-4.0	21.6	23.4
Unit Profit	0.0	1.9	3.4	3.3	2.0				
	0.0	4.5	4.1	6.8	11.0	-0.5	7.9	0.2	0.7
Unit Labor Cost	0.0	0.3	-0.5	0.0	-0.6				
	0.0	14.6	-0.4	0.5	-0.7	0.9	-0.4	-0.5	0.6