



# Japanese Economy Monthly Forecast

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Yoshihisa Inada

Head of the Center for Quantitative Economic Analysis, APIR

e-mail: inada-y@apir.or.jp

## Headlines

### ● Review of latest official data

▶ This forecast reflects data released through the last week of October. Apart from household consumption-related indicators, public works, and the balance of payments in September, most data needed for an accurate estimate of Q3 GDP has been released.

▶ The index of industrial production in September rose +0.2% MoM, marking the first increase in three months. No clear trend can be observed. As a result, the Q3 figure fell -1.3% QoQ, marking the first decline in two quarters.

▶ The real aggregate consumption index fell -0.1% MoM in August, marking the first decline in three months. The July-August average was slightly down (-0.0%) from Q2 average.

▶ Comparing Q3 with the previous quarter, planned construction expenditures fell -1.2%, marking the first decline in three quarters. The index for shipments of capital goods declined too (-1.8%), for the first time in two quarters. Meanwhile, the July-August average for public works increased +0.2% over the Q2 average.

▶ Comparing Q3 with the previous quarter, real exports kept increasing (+0.8%) for the second consecutive quarter, while real imports kept decreasing (-0.1%) for the third quarter in a row. The contribution of net exports to real GDP growth in Q3 was slightly lower than in the previous quarter.

### ● 2023 Q3 real GDP growth forecast update

▶ APIR's expenditure-side CQM forecast for real GDP growth in 2023 Q3 is an annualized -1.8% QoQ. On the other hand, the production-side forecast figure is an annualized +0.0% QoQ. The average of the two forecasts is an annualized -0.9%, which is somewhat lower than the market consensus forecast figure of -0.48% (Figure 1).

### ● 2023 Q3 inflation forecast update

▶ In September, the national CPI rose by +2.8%, marking the 25th month of inflation. The core CPI rose by +3.1%. Although inflation had remained in the 3%-range for the seven months, since August, partly it has been in the 2% range due to a decline in energy prices. On a quarterly basis, CPI inflation in Q3 was +3.0% YoY, marking the eighth consecutive quarter of inflation.

▶ Our CQM forecasts for the private final consumption expenditure deflator and the domestic demand deflator in 2023 Q3 are respectively +0.5% and +0.3% QoQ. However, since the terms of trade are expected to improve significantly, we forecast a headline inflation rate (GDP deflator) of +0.7% QoQ (Figure 2).

Fig 1 CQM Forecast: Real GDP Growth Rate Jul-Sep (Q3) 2023 (% , QoQ annualized growth)

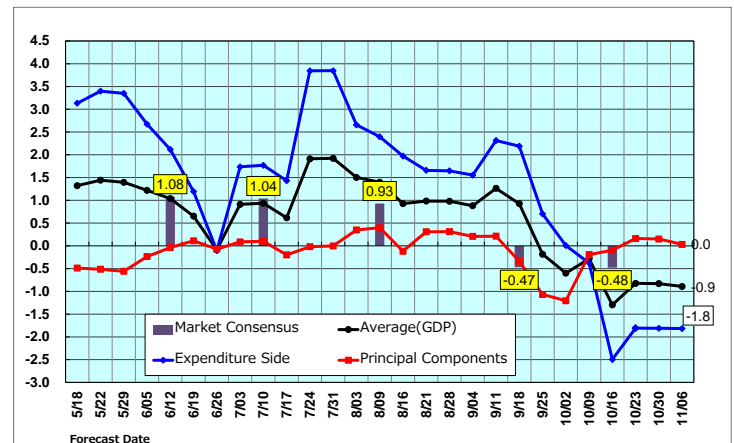
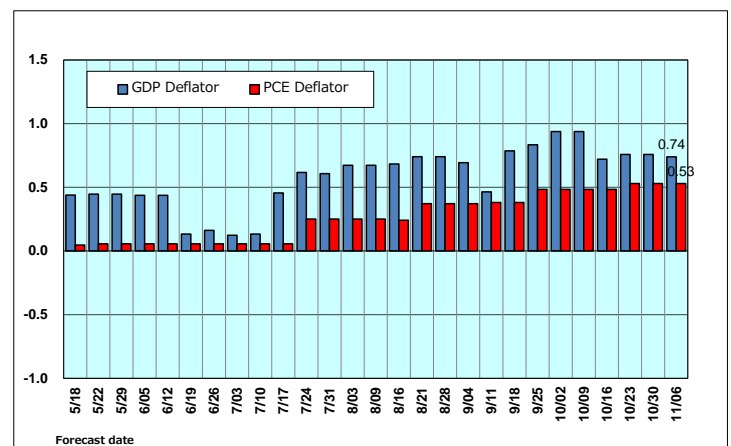


Fig 2 CQM Forecast: Inflation Jul-Sep (Q3) 2023 (% , QoQ growth)



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
11/2	October	<b>Food Balance (billion JPY)</b>	+39.9		+4.2
11/1	October	<b>New Car Sales (vehicles)</b>	334,485		+13.1%
10/31	September	<b>Labor Force Survey</b> Total employment (millions)	67.56	+0.06	
		Total unemployment (millions)	1.77	-0.08	
		Unemployment rate (%)	2.6%	-0.1%pt	
	September	<b>General Job Placement Situation</b> Job offers-to-applicants ratio	1.29	0.0%pt	
		<b>Indices of Industrial Production (preliminary figures, 2020=100)</b> Production	103.3	+0.2%	
	September	Shipments	103.2	+0.4%	
		Inventories	103.8	-1.1%	
	September	<b>Current Survey of Commerce (preliminary figures)</b> Retail trade (billion JPY)	13,357.0	-0.1%	+5.8%
		<b>New Housing Starts</b> New housing starts (SA, Unit)	68,941	-1.5%	-6.8%
	September	Planned residential construction expenditure (billion JPY)	1,310.7	-3.1%	+3.1%
		<b>Construction Costs Deflator (2015=100)</b> Housing construction	123.0		+0.7%
	August	Public works	122.6		+3.5%
		<b>Consumer Confidence Index (SA)</b>	35.7	+0.5	
	October				
10/30	September	<b>Producer Price Index for Intermediate and Final Demand (2015=100)</b> Capital goods	107.2		+3.9%
		Consumer goods	111.2		+1.1%
10/27	October	<b>Tokyo Region Consumer Price Index (2020=100)</b> Core	106.0	+0.7%	+2.7%
10/26	September	<b>Corporate Services Price Index (2015=100)</b> Overall index	109.5		+2.1%
10/25	August	<b>Index of Business Conditions (revised, 2015=100)</b> Leading indicators	109.2	+1.0	
		Coincident indicators	114.6	+0.4	
		Lagging indicators	105.9	+0.2	
10/24	August	<b>Monthly Labor Statistics (final figures)</b> Gross average salary per worker (JPY)	281,714		+0.8%
		Total working hours	131.8		-0.3%
10/20	September	<b>National Consumer Price Index (2020=100)</b> Core index	105.7	+0.1%	+2.8%
10/19	September	<b>Trade Statistics (customs clearance level)</b> Trade balance (billion JPY)	62.4	-21.5%	+2,161.6
		Exports (billion JPY)	9,198.1	+7.2%	+4.3%
		Imports (billion JPY)	9,135.7	+5.4%	-16.3%

10/18	August	<b>General Construction Statistics</b> Private non-residential construction (billion JPY) Public works (billion JPY)	932.2 1,741.7		+0.4% +3.5%
10/17	August	<b>Tertiary Industry Activity Index (2015=100)</b>	101.8	-0.1%	
10/16	August	<b>Indices of Industrial Production (final figures, 2020=100)</b> Production Shipments Inventory Production capacity index Capacity utilization ratio	103.1 102.8 105.0 98.3 106.2	-0.7% -0.3% -1.3%  +0.5%	+0.1%
10/13	September	<b>Public Works Advanced Securities Statistics</b> Contract amount (billion JPY) Number of contracts	1,299.5 25,074		+0.1% -3.7%
10/12	August September	<b>Private Core Machinery Orders (billion JPY)</b> <b>Domestic Corporate Price Index (2020=100)</b> Corporate Price Export Price Import Price	840.7  119.3 135.3 162.5	-0.5%  -0.3% +1.7% +2.1%	+2.0% +2.5% -14.0%
10/10	August September  August	<b>Information Services Industry Sales (billion JPY)</b> <b>Economy Watchers Survey</b> Current Conditions Diffusion Index Business Outlook Diffusion Index <b>Balance of Payments</b> Current account (billion JPY) Exports (billion JPY) Imports (billion JPY)	1,192.8  49.9 49.5  2,279.7 7,893.5 8,643.0	  -3.7 -1.9  -40.9% +1.6% +0.1%	+8.5%    +237.9% -0.6% -18.2%
10/6	August  August  August August August	<b>Monthly Labor Statistics (preliminary figures)</b> Gross average salary per worker (JPY) Total working hours <b>Family Income and Expenditure Survey (households with 2 or more people)</b> Nominal consumption expenditure (JPY) Real consumption expenditure <b>Consumption Trend Index (2020=100)</b> <b>Consumption Activity Index (2015=100)</b> <b>Index of Business Conditions (preliminary figures, 2020=100)</b> Leading indicators Coincident indicators Lagging indicators	282,700 132.3  293,161  103.5 97.4  109.5 114.3 106.0	   +4.0% +3.9% -0.1% +0.7%  +1.3 +0.1 +0.3	+1.1% 0.0%  +1.1% -2.5%

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
	2023Q2					2023Q3					2023Q4				
	SAAR (%)			QoQ (%)		SAAR (%)			QoQ (%)		SAAR (%)			QoQ (%)	
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															
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					
8/10	4.4	2.5	3.5	1.6	0.5	2.4	0.4	1.4	0.7	0.3					
8/15	<u>6.0</u>			<u>1.4</u>	<u>0.4</u>	0.0	0.0	0.0	0.0	0.0					
8/16						2.0	-0.1	0.9	0.7	0.2	0.0	0.5	0.2	0.2	0.1
8/21						1.7	0.3	0.5	0.7	0.4	0.0	0.5	0.2	0.2	0.1
8/28						1.6	0.3	1.0	0.7	0.4	0.0	0.5	0.2	0.2	0.1
9/04						1.6	0.2	0.9	0.7	0.4	-0.2	0.6	0.2	0.2	0.1
9/08	4.8*			1.6*	0.4*										
9/11						2.3	0.2	1.3	0.5	0.4	-0.2	0.5	0.2	0.2	0.1
9/18						2.2	-0.3	0.9	0.8	0.4	0.1	0.5	0.3	0.4	0.1
9/25						0.7	-1.1	-0.2	0.8	0.5	-1.7	0.1	-0.8	0.4	0.2
10/02						0.0	-1.2	-0.6	0.9	0.5	-2.2	0.2	-1.0	0.4	0.2
10/09						-0.4	-0.2	-0.3	0.9	0.5	-2.2	0.2	-1.0	0.4	0.2
10/16						-2.5	-0.1	-1.3	0.7	0.5	-2.7	0.3	-1.2	0.1	0.2
10/23						-1.8	0.2	-0.8	0.8	0.5	-0.9	0.7	-0.1	0.2	0.2
10/30						-1.8	0.2	-0.8	0.8	0.5	-0.9	0.7	-0.1	0.2	0.2
11/06						-1.8	0.0	-0.9	0.7	0.5	-1.1	0.7	-0.2	0.2	0.2

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	
	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2022	2023	2022	2023
GDP/GDE									
Gross Domestic Products	547,761	552,142	558,603	556,050	554,552	546,556	555,337	549,232	556,577
Private Consumption	295,741	297,485	295,575	295,249	295,650	293,973	295,990	295,916	295,625
Residential Investment	18,300	18,421	18,783	18,799	18,732	18,267	18,684	18,247	18,765
Nonresidential Investment	90,001	91,454	90,528	89,948	89,876	89,249	90,452	90,404	90,007
Change in Private Inventory	859	2,494	1,760	1,857	-265	2,401	1,462	2,295	1,032
Government Consumption	118,707	118,799	118,833	118,894	119,391	118,470	118,979	118,661	119,252
Public Investment	26,680	27,061	27,127	27,207	27,102	26,487	27,124	26,706	27,181
Change in Public Inventory	-30	-63	-71	-152	-87	-103	-93	-104	-106
Net Exports	-1,787	-3,471	4,661	2,841	2,746	-1,596	1,694	-2,250	3,415
Exports of Goods & Services	111,064	106,834	110,115	109,851	110,274	108,069	109,268	108,532	110,348
Imports of Goods & Services	112,852	110,305	105,454	107,009	107,528	109,664	107,574	110,782	106,933
Gross National Income	567,284	568,986	582,060	583,042	581,010	563,956	578,775	566,030	581,924
Memo:									
Total Demand	660,612	662,447	664,057	663,059	662,079	656,220	662,911	660,014	663,510
Upper Row : % change from the previous quarter Lower Row : % change from a year earlier									
Gross Domestic Products	0.1	0.8	1.2	-0.5	-0.3				
<b>SAAR</b>	<b>0.2</b>	<b>3.2</b>	<b>4.8</b>	<b>-1.8</b>	<b>-1.1</b>				
% Change Year Ago	0.5	1.8	1.7	1.6	1.2	1.0	1.6	1.4	1.3
Private Consumption	0.3	0.6	-0.6	-0.1	0.1				
% Change Year Ago	1.0	2.6	0.2	0.1	0.0	2.1	0.7	2.5	-0.1
Residential Investment	1.0	0.7	2.0	0.1	-0.4				
% Change Year Ago	-2.2	-0.4	3.5	3.7	2.4	-3.5	2.3	-3.0	2.8
Nonresidential Investment	-0.7	1.6	-1.0	-0.6	-0.1				
% Change Year Ago	2.8	4.5	1.4	-0.7	-0.1	1.9	1.3	3.1	-0.4
Government Consumption	0.2	0.1	0.0	0.1	0.4				
% Change Year Ago	1.2	0.6	0.2	0.3	0.6	1.2	0.4	0.7	0.5
Public Investment	0.1	1.4	0.2	0.3	-0.4				
% Change Year Ago	-2.2	3.2	2.8	2.1	1.6	-7.2	2.4	-3.1	1.8
Exports of Goods & Services	1.5	-3.8	3.1	-0.2	0.4				
% Change Year Ago	7.3	1.9	3.0	0.3	-0.7	5.1	1.1	4.5	1.7
Imports of Goods & Services	-0.1	-2.3	-4.4	1.5	0.5				
% Change Year Ago	10.4	4.1	-1.6	-5.3	-4.7	8.0	-1.9	7.2	-3.5
Gross National Income	1.0	0.3	2.3	0.2	-0.3				
<b>SAAR</b>	<b>3.9</b>	<b>1.2</b>	<b>9.5</b>	<b>0.7</b>	<b>-1.4</b>				
% Change Year Ago	0.6	1.1	3.0	3.8	2.4	0.2	2.6	0.5	2.8
Total Demand	0.0	0.3	0.2	-0.2	-0.1				
<b>SAAR</b>	<b>0.1</b>	<b>1.1</b>	<b>1.0</b>	<b>-0.6</b>	<b>-0.6</b>				
% Change Year Ago	0.0	13.9	1.2	0.4	0.2	2.1	1.0	2.3	0.5
Contribution to GDP Growth Rate									
Domestic Demand	-0.3	1.0	-0.6	-0.1	-0.3	1.6	0.7	1.9	0.0
Private Demand	-0.3	0.9	-0.6	-0.1	-0.3	1.7	0.5	1.9	-0.2
Public demand	0.1	0.1	0.0	0.0	0.1	-0.1	0.2	0.0	0.2
Net Exports	0.3	-0.2	1.7	-0.3	0.0	-0.5	0.9	-0.5	1.4

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

	Quarterly			Forecast		CY		FY	
	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2022	2023	2022	2023
GDP/GDE									
Gross Domestic Products	561,443	573,722	589,476	591,152	590,422	557,227	586,193	562,708	589,908
Private Consumption	313,555	318,971	318,013	319,333	320,532	308,635	319,212	312,921	319,353
Residential Investment	21,756	21,830	22,220	22,255	22,146	21,631	22,113	21,684	22,186
Nonresidential Investment	97,414	99,290	99,218	99,416	100,038	95,104	99,490	97,269	99,798
Change in Private Inventory	1,065	1,956	2,854	1,565	-729	2,886	1,412	2,633	982
Government Consumption	121,994	122,223	122,146	122,666	123,164	120,826	122,550	121,470	122,908
Public Investment	30,276	30,793	31,150	31,337	31,265	29,649	31,136	30,170	31,228
Change in Public Inventory	-5	-6	-19	-260	-211	-254	-124	-242	-180
Net Exports	-24,614	-21,334	-6,105	-5,160	-5,784	-21,249	-9,596	-23,198	-6,366
Exports of Goods & Services	127,535	119,618	124,400	127,564	131,153	120,233	125,684	122,795	128,848
Imports of Goods & Services	152,149	140,952	130,506	132,723	136,937	141,482	135,279	145,992	135,214
Gross National Income	601,309	607,043	625,155	628,073	627,335	592,280	621,901	598,162	626,742
Memo:									
Total Demand	713,592	714,673	719,982	723,875	727,359	698,709	721,472	708,700	725,122
Compensation of Employee	296,134	297,547	300,700	299,301	300,357	294,492	299,476	295,376	300,080
Upper Row : % change from the previous quarter Lower Row : % change from a year earlier									
Gross Domestic Products	1.2	2.2	2.7	0.3	-0.1				
<b>SAAR</b>	<b>5.0</b>	<b>9.0</b>	<b>11.4</b>	<b>1.1</b>	<b>-0.5</b>				
% Change Year Ago	1.7	3.7	5.3	6.6	5.2	1.3	5.2	2.0	4.8
Private Consumption	1.1	1.7	-0.3	0.4	0.4				
% Change Year Ago	4.5	5.7	3.0	2.9	2.2	5.0	3.4	5.6	2.1
Residential Investment	0.7	0.3	1.8	0.2	-0.5				
% Change Year Ago	1.1	1.1	3.1	3.0	1.8	3.1	2.2	1.7	2.3
Nonresidential Investment	0.2	1.9	-0.1	0.2	0.6				
% Change Year Ago	7.3	8.3	4.8	2.2	2.7	6.0	4.6	7.4	2.6
Government Consumption	0.5	0.2	-0.1	0.4	0.4				
% Change Year Ago	3.0	2.1	1.7	1.0	1.0	2.6	1.4	2.1	1.2
Public Investment	0.8	1.7	1.2	0.6	-0.2				
% Change Year Ago	2.1	6.8	5.9	4.3	3.3	-2.9	5.0	1.2	3.5
Exports of Goods & Services	1.9	-6.2	4.0	2.5	2.8				
% Change Year Ago	22.0	9.4	4.7	1.9	2.8	20.0	4.5	18.3	4.9
Imports of Goods & Services	-1.0	-7.4	-7.4	1.7	3.2				
% Change Year Ago	34.4	15.0	-4.9	-13.7	-10.0	37.3	-4.4	32.1	-7.4
Gross National Income	1.9	1.0	3.0	0.5	-0.1				
<b>SAAR</b>	<b>7.7</b>	<b>3.9</b>	<b>12.5</b>	<b>1.9</b>	<b>-0.5</b>				
% Change Year Ago	3.5	3.5	5.5	6.4	4.3	2.7	5.0	3.0	4.8
Memo:									
Total Demand	0.7	0.2	0.7	0.5	0.5				
<b>SAAR</b>	<b>2.9</b>	<b>0.6</b>	<b>3.0</b>	<b>2.2</b>	<b>1.9</b>				
% Change Year Ago	0.0	30.0	3.3	2.2	1.9	0.0	7.0	0.0	7.1
Compensation of Employee	0.5	0.5	1.1	-0.5	0.4				
% Change Year Ago	2.5	1.5	2.5	1.5	1.4	2.0	1.7	2.0	1.6

Table 3-3: Deflator : 2015=100

	Quarterly		Forecast			CY		FY	
	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2022	2023	2022	2023
GDP/GDE									
Gross Domestic Products	102.5	103.9	105.5	106.3	106.5	101.9	105.6	102.4	106.0
Private Consumption	106.0	107.2	107.6	108.2	108.4	105.0	107.9	105.7	108.0
Residential Investment	118.9	118.5	118.3	118.4	118.2	118.4	118.4	118.8	118.2
Nonresidential Investment	108.2	108.6	109.6	110.5	111.3	106.6	110.0	107.5	110.9
Government Consumption	102.8	102.9	102.8	103.2	103.2	102.0	103.0	102.4	103.1
Public Investment	113.5	113.8	114.8	115.2	115.4	111.9	114.8	112.9	114.9
Exports of Goods & Services	114.8	112.0	113.0	116.1	118.9	111.2	115.0	113.1	116.8
Imports of Goods & Services	134.8	127.8	123.8	124.0	127.4	128.8	125.7	131.7	126.4
Unit Profit	105.1	108.5	112.2	113.9	113.5	104.3	112.0	105.6	113.0
Unit Labor Cost	100.3	100.0	99.9	99.9	100.5	100.0	100.1	99.8	100.0
Upper Row : % change from the previous quarter Lower Row : % change from a year earlier									
Gross Domestic Products	1.2	1.4	1.6	0.7	0.2				
	1.2	1.8	3.5	4.9	3.9	0.2	3.6	0.6	3.5
Private Consumption	0.8	1.1	0.3	0.5	0.2				
	3.5	3.0	2.8	2.9	2.3	2.8	2.7	3.0	2.2
Residential Investment	-0.2	-0.3	-0.2	0.1	-0.1				
	3.4	1.5	-0.4	-0.6	-0.6	6.9	0.0	4.9	-0.5
Nonresidential Investment	0.9	0.3	1.0	0.9	0.7				
	4.4	3.7	3.3	3.0	2.8	4.1	3.2	4.1	3.1
Government Consumption	0.3	0.1	-0.1	0.4	0.0				
	1.8	1.5	1.5	0.7	0.4	1.4	1.0	1.4	0.7
Public Investment	0.7	0.3	0.9	0.3	0.2				
	4.4	3.5	3.0	2.2	1.7	4.7	2.6	4.5	1.8
Exports of Goods & Services	0.4	-2.5	0.9	2.8	2.4				
	13.7	7.4	1.7	1.5	3.6	14.1	3.5	13.2	3.2
Imports of Goods & Services	-0.9	-5.2	-3.2	0.2	2.7				
	21.7	10.4	-3.4	-8.9	-5.5	27.1	-2.4	23.3	-4.0
Unit Profit	0.0	3.3	3.4	1.5	-0.3				
	0.0	8.1	6.6	10.6	8.0	-0.5	7.4	0.7	7.0
Unit Labor Cost	0.0	-0.3	-0.1	0.0	0.6				
	0.0	14.1	0.7	0.0	0.2	0.9	0.1	0.6	0.3