



# Japanese Economy Monthly Forecast

November 2021

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

## Headlines

### ● Review of data released in November

▶ Japan's real Q3 GDP (first advance estimate) declined -3.0% YoY, performing much worse than the final market consensus forecast.

▶ Similar to the market consensus forecast, APIR's final expenditure-side forecast for Q3 was higher than the actual figure. However, APIR's final production-side Q3 forecast was spot-on.

▶ The current forecast reflects official data released by the end of November. About one-third of all statistics required for an accurate estimation of Japan's 2021 Q4 GDP have been released. Data on household consumption and public works are not available yet.

▶ In September, the Synthetic Consumption Index declined for the third month in a row (-0.1% MoM). However, based on human mobility data, we estimate that the index is likely to have risen by +2.3% MoM in October.

▶ The amount of total planned construction in October increased for the first time in two months, up +8.0% from the previous month. The figure was +4.0% higher than the Q3 average. In the same month, the capital goods shipments index rose for the first time in three months (+4.8% MoM), but it remained -1.1% lower than the Q3 average.

▶ In September, public construction works declined for the third consecutive month, both YoY (-6.9%) and MoM (-2.1%, seasonally adjusted). As a result, the Q3 figure decreased -2.7% QoQ, marking the third straight quarter in negative territory.

▶ In October, real exports increased for the first time in three months (+0.0% MoM). However, real imports kept declining for the second consecutive month (-9.1% MoM). Compared to the Q3 average, real exports and imports decreased -3.8% and -8.2%, respectively. Net exports made a positive contribution to growth.

### ● 2021 Q4 real GDP growth forecast update

▶ APIR's real GDP growth forecast for Q4 is an annualized +6.8% QoQ, which is the average of the expenditure-side forecast (+6.9%) and the production-side forecast (+6.8%). All APIR forecast figures exceed the market consensus forecast (Figure 1).

### ● 2021 Q4 inflation forecast update

▶ In October, Japan's Consumer Price Index (CPI) kept increasing YoY for the second consecutive month. The impact of the wood supply shock crystalized in September, as reflected by the residential construction deflator.

▶ Our CQM forecasts for the private final consumption expenditure deflator and the domestic demand deflator in 2021 Q4 are respectively -0.3% and +0.1% QoQ. However, as the terms of trade have deteriorated, we forecast a GDP deflator of -0.5% QoQ in Q4 (Figure 2).

Fig 1 CQM Forecast: Real GDP Growth Rate Oct-Dec (Q4) 2021 (% , QoQ annualized growth)

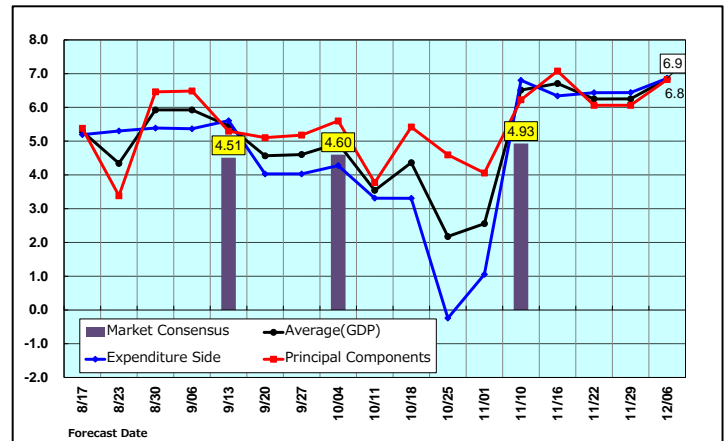
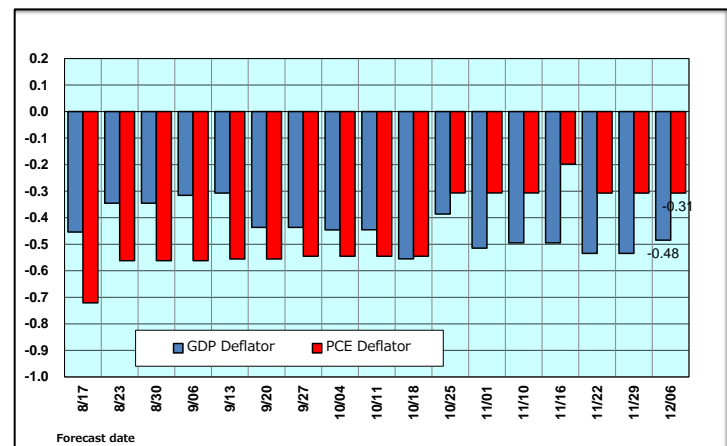


Fig 2 CQM Forecast: Inflation Oct-Dec (Q4) 2021 (% , QoQ growth)



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
12/3	September	<b>Synthetic Consumption Index (2015=100)</b>	93.9	-0.1%	
12/2	November	<b>Consumer Confidence Index (SA)</b>	39.2	0.0	
	November	<b>Food Buffer Stock (billion JPY)</b>	+25.7		-3.8
12/1	November	<b>New Car Sales (vehicles)</b>	291,665		-13.4%
11/30	October	<b>Labor Force Survey</b>			
		Total employment (millions)	66.24	-0.24	
		Total unemployment (millions)	1.82	-0.07	
		Unemployment rate (%)	2.7%	-0.1%pt	
	October	<b>General Job Placement Situation</b>			
		Job offers-to-applicants ratio	1.15	-0.01pt	
	October	<b>Indices of Industrial Production (preliminary figures, 2015=100)</b>			
		Production	90.5	+1.1%	
		Shipments	88.3	+2.0%	
		Inventories	98.9	+0.8%	
	October	<b>New Housing Starts</b>			
		New housing starts (SA, Unit)	78,004	+5.6%	+10.4%
		Planned residential construction expenditure (billion JPY)	1,349.6	+8.0%	+14.9%
	September	<b>Construction Costs Deflator (2015=100)</b>			
		Housing construction	114.5		+7.4%
		Public works	112.2		+3.8%
11/29	October	<b>Current Survey of Commerce (preliminary figures)</b>			
		Retail trade (billion JPY)	12,552.0	+1.1%	+0.9%
	October	<b>Manufacturing Industry Input-Output Price Index (2011=100)</b>			
		Input price	109.9		+17.2%
		Output price	106.2		+8.9%
11/26	November	<b>Tokyo Region Consumer Price Index (2020=100)</b>			
		Core	100.0	+0.2%	+0.3%
11/25	September	<b>Index of Business Conditions (revised figures, 2015=100)</b>			
		Leading indicators	100.9	-0.4	
		Coincident indicators	88.7	-2.6	
		Lagging indicators	94.1	0.0	
	October	<b>Corporate Services Price Index (2015=100)</b>			
		Overall index	105.4		+1.0%
11/24	September	<b>Monthly Labor Statistics (final figures)</b>			
		Total cash salary per capita (JPY)	269,932		+0.2%
		Total working hours	135.1		-0.5%
11/19	October	<b>National Consumer Price Index (2020=100)</b>			
		Core index	99.9	-0.1%	+0.1%
11/17	September	<b>General Construction Statistics</b>			
		Private non-residential construction (billion JPY)	825.3		+2.6%
		Public works (billion JPY)	1,883.4		-6.9%
	October	<b>Trade Statistics (customs clearance level)</b>			
		Trade balance (billion JPY)	-67.4	-26.6%	-908.2

		Exports (billion JPY)	7,184.0	+2.7%	+9.4%
		Imports (billion JPY)	7,251.4	+0.3%	+26.7%
11/16	September	<b>Tertiary Industry Activity Index (2015=100)</b>	96.0	+0.5%	
11/15	October	<b>Public Works Advanced Securities Statistics</b>			
		Contract amount (billion JPY)	1,076.7		-19.8%
		Number of contracts	23,889		-10.7%
	September	<b>Indices of Industrial Production (final figures, 2015=100)</b>			
		Production	89.5	-5.4%	
		Shipments	86.6	-6.1%	
		Inventory	98.1	+3.4%	
		Production capacity index	96.2		-1.1%
		Capacity utilization ratio	84.5	-7.3%	
11/11	October	<b>Domestic Corporate Price Index (2015=100)</b>			
		Corporate Price	107.8	+1.2%	+8.0%
		Export Price	102.2	+2.1%	+13.7%
		Import Price	113.4	+4.1%	+38.0%
11/9	September	<b>Monthly Labor Statistics (preliminary figures)</b>			
		Total cash salary per capita (JPY)	270,019		+0.2%
		Total working hours	135.2		-0.5%
	September	<b>Information Services Industry Sales (billion JPY)</b>	1,502.0		-0.1%
	October	<b>Economy Watchers Survey</b>			
		Current Conditions Diffusion Index	55.5	+13.4	
		Future Conditions Diffusion Index	57.5	+0.9	
	September	<b>Balance of Payments</b>			
		Current account (billion JPY)	1,033.7	-13.3%	-31.1%
		Exports (billion JPY)	6,907.7	-5.4%	+16.1%
		Imports (billion JPY)	7,137.6	-0.2%	+41.6%
11/8	September	<b>Consumption Activity Index (2015=100)</b>	90.2	+0.7%	
	September	<b>Index of Business Conditions (preliminary, 2015=100)</b>			
		Leading indicators	99.7	-1.6	
		Coincident indicators	87.5	-3.8	
		Lagging indicators	94.9	+0.8	
11/5	September	<b>Family Income and Expenditure Survey (households with 2 or more people)</b>			
		Nominal consumption expenditure (JPY)	265,306	+5.8%	-1.7%
		Real consumption expenditure		+5.0%	-1.9%
	September	<b>Consumption Trend Index (2020=100)</b>	99.5	+0.8%	
11/2	October	<b>Food Buffer Stock (billion JPY)</b>	+22.5		+4.9
11/1	October	<b>New Car Sales (vehicles)</b>	230,499		-32.2%

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
	2021Q3					2021Q4					2022Q1				
	SAAR (%)			QoQ (%)		SAAR (%)			QoQ (%)		SAAR (%)			QoQ (%)	
5/19	4.2	2.4	3.3	-0.4	-0.1										
5/24	4.8	4.5	4.7	-0.4	-0.1										
5/31	5.7	5.2	5.4	-0.4	-0.1										
6/07	5.7	3.9	4.8	-0.4	-0.1										
<b>6/08</b>															
6/14	5.6	4.4	5.0	-0.1	-0.1										
6/21	5.3	4.3	4.8	-0.1	-0.1										
6/28	4.7	4.3	4.5	-0.1	-0.1										
7/05	4.8	1.6	3.2	-0.1	-0.1										
7/12	3.8	1.3	2.6	-0.1	-0.1										
7/19	4.1	0.8	2.5	-0.4	-0.1										
7/26	3.9	0.4	2.1	-0.3	0.1										
8/02	3.2	4.8	4.0	-0.3	0.1										
8/11	3.0	4.3	3.7	-0.3	0.1										
8/16	0.0	0.0	0.0	0.0	0.0										
<b>8/17</b>	1.6	0.2	0.9	-0.1	0.1	5.2	5.4	5.3	-0.5	-0.7					
8/23	3.8	2.3	3.1	0.0	0.2	5.3	3.4	4.3	-0.3	-0.6					
8/30	3.7	2.8	3.3	0.0	0.2	5.4	6.5	5.9	-0.3	-0.6					
9/06	4.0	2.2	3.1	0.0	0.2	5.4	6.5	5.9	-0.3	-0.6					
<b>9/08</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
9/13	4.0	1.7	2.8	0.0	0.2	5.6	5.3	5.5	-0.3	-0.6					
9/20	2.2	1.2	1.7	-0.1	0.2	4.0	5.1	4.6	-0.4	-0.6					
9/27	2.2	1.2	1.7	-0.1	0.2	4.0	5.2	4.6	-0.4	-0.5					
10/04	0.9	-1.7	-0.4	0.0	0.2	4.3	5.6	4.9	-0.4	-0.5					
10/11	-0.1	-1.9	-1.0	0.0	0.2	3.3	3.8	3.5	-0.4	-0.5					
10/18	-0.2	-2.1	-1.2	-0.1	0.2	3.3	5.4	4.4	-0.6	-0.5					
10/25	-1.7	-2.7	-2.2	0.0	0.4	-0.2	4.6	2.2	-0.4	-0.3					
11/01	-1.8	-4.0	-2.9	0.1	0.4	1.1	4.1	2.6	-0.5	-0.3					
11/10	-0.7	-3.8	-2.2	0.1	0.4	6.8	6.2	6.5	-0.5	-0.3					
11/15	<u>-3.0</u>			<u>0.1</u>	<u>0.3</u>										
11/16						6.3	7.1	6.7	-0.5	-0.2	1.2	3.6	2.4	0.4	0.5
11/22						6.4	6.1	6.2	-0.5	-0.3	0.3	3.5	1.9	0.4	0.5
11/29						6.4	6.1	6.3	-0.5	-0.3	0.3	3.5	1.9	0.4	0.5
12/06						6.9	6.8	6.8	-0.5	-0.3	0.6	2.2	1.4	0.4	0.5

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	
	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2020	2021	2020	2021
GDP/GDE									
Gross Domestic Products	536,858	538,825	534,706	543,651	544,498	528,955	538,510	527,133	540,420
Private Consumption	286,254	288,877	285,595	293,720	294,907	284,207	288,611	282,323	290,775
Residential Investment	18,809	19,188	18,682	18,556	18,681	19,133	18,809	18,929	18,777
Nonresidential Investment	84,898	86,765	83,462	82,852	82,832	85,565	84,494	84,295	83,978
Change in Private Inventory	1,418	-571	1,132	1,618	1,755	1,537	899	1,287	984
Government Consumption	114,945	116,217	117,549	118,258	118,795	113,573	116,742	114,566	117,705
Public Investment	29,103	28,495	28,074	27,535	27,432	28,940	28,302	29,225	27,884
Change in Public Inventory	0	-26	-59	-1	1	-5	-22	-11	-21
Net Exports	1,425	-537	98	939	-78	-4,301	481	-3,866	106
Exports of Goods & Services	100,282	103,539	101,322	99,980	99,907	91,728	101,281	91,975	101,187
Imports of Goods & Services	98,858	104,076	101,224	99,040	99,985	96,028	100,800	95,841	101,081
Gross National Income	557,686	557,617	549,667	556,006	557,086	551,063	555,244	549,422	555,094
Memo:									
Total Demand	635,716	642,901	635,930	642,691	644,483	624,984	639,309	622,974	641,501
Upper Row : % change from the previous quarter Lower Row : % change from a year earlier									
Gross Domestic Products	-1.1	0.4	-0.8	1.7	0.2				
<b>SAAR</b>	<b>-4.1</b>	<b>1.5</b>	<b>-3.0</b>	<b>6.9</b>	<b>0.6</b>				
% Change Year Ago	-1.3	7.7	1.3	0.2	1.4	-4.6	1.8	-4.4	2.5
Private Consumption	-1.3	0.9	-1.1	2.8	0.4				
% Change Year Ago	-2.5	7.2	0.7	1.3	3.0	-5.8	1.5	-5.8	3.0
Residential Investment	1.1	2.0	-2.6	-0.7	0.7				
% Change Year Ago	-4.2	-2.8	0.4	-0.3	-0.7	-7.1	-1.7	-7.2	-0.8
Nonresidential Investment	-1.0	2.2	-3.8	-0.7	0.0				
% Change Year Ago	-5.2	3.2	1.4	-3.4	-2.4	-6.0	-1.3	-6.9	-0.4
Government Consumption	-1.7	1.1	1.1	0.6	0.5				
% Change Year Ago	3.6	4.1	2.4	1.1	3.3	2.8	2.8	3.4	2.7
Public Investment	-1.4	-2.1	-1.5	-1.9	-0.4				
% Change Year Ago	3.5	-1.5	-4.2	-6.7	-5.7	3.6	-2.2	4.2	-4.6
Exports of Goods & Services	2.4	3.2	-2.1	-1.3	-0.1				
% Change Year Ago	1.2	26.8	15.5	2.1	-0.4	-11.7	10.4	-10.4	10.0
Imports of Goods & Services	4.0	5.3	-2.7	-2.2	1.0				
% Change Year Ago	-0.6	5.3	11.6	4.2	1.1	-7.3	5.0	-6.8	5.5
Gross National Income	-1.5	0.0	-1.4	1.2	0.2				
<b>SAAR</b>	<b>-6.0</b>	<b>0.0</b>	<b>-5.6</b>	<b>4.7</b>	<b>0.8</b>				
% Change Year Ago	-1.1	6.7	0.0	-1.8	-0.1	-4.0	0.8	-3.8	1.0
Total Demand	-0.3	1.1	-1.1	1.1	0.3				
<b>SAAR</b>	<b>-1.2</b>	<b>4.6</b>	<b>-4.3</b>	<b>4.3</b>	<b>1.1</b>				
% Change Year Ago	0.0	10.5	2.8	0.8	1.4	-5.0	2.3	-4.8	3.0
Contribution to GDP Growth Rate									
Domestic Demand	-0.8	0.7	-0.9	1.5	0.3	-3.8	0.9	-3.8	1.8
Private Demand	-0.4	0.6	-1.0	1.5	0.3	-4.6	0.4	-4.7	1.4
Public demand	-0.4	0.1	0.2	0.0	0.1	0.8	0.5	0.9	0.3
Net Exports	-0.2	-0.3	0.1	0.2	-0.2	-0.8	0.9	-0.6	0.8

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

	Quarterly			Forecast		CY		FY	
	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2020	2021	2020	2021
GDP/GDE									
Gross Domestic Products	545,133	543,830	540,403	546,804	549,822	538,701	544,042	536,657	545,215
Private Consumption	290,283	290,817	288,402	295,690	298,329	288,402	291,298	286,150	293,310
Residential Investment	19,972	20,761	20,972	21,265	21,437	20,142	20,742	19,942	21,109
Nonresidential Investment	85,872	88,377	85,771	86,007	86,503	86,209	86,507	84,875	86,664
Change in Private Inventory	1,243	-1,143	940	1,492	1,516	1,131	633	840	701
Government Consumption	115,334	116,943	119,184	120,151	120,814	113,872	117,903	114,684	119,273
Public Investment	30,674	30,365	30,166	29,717	29,665	30,264	30,230	30,610	29,978
Change in Public Inventory	26	-21	-78	4	6	10	-17	12	-23
Net Exports	1,729	-2,267	-4,953	-7,522	-8,448	-1,329	-3,254	-457	-5,798
Exports of Goods & Services	93,576	99,941	100,309	100,370	101,022	83,829	98,549	84,259	100,411
Imports of Goods & Services	91,847	102,209	105,263	107,892	109,470	85,158	101,803	84,715	106,208
Gross National Income	565,754	564,630	560,661	567,622	570,767	558,246	564,667	555,852	565,920
Memo:									
Total Demand	636,980	646,039	645,666	654,696	659,292	623,859	645,845	621,372	651,423
Compensation of Employee	288,963	284,265	285,693	286,505	287,519	282,481	286,357	282,244	285,996
Upper Row : % change from the previous quarter Lower Row : % change from a year earlier									
Gross Domestic Products	-1.1	-0.2	-0.6	1.2	0.6				
<b>SAAR</b>	<b>-4.4</b>	<b>-1.0</b>	<b>-2.5</b>	<b>4.8</b>	<b>2.2</b>				
% Change Year Ago	-1.4	6.5	0.3	-0.8	0.9	-3.8	1.0	-3.9	1.6
Private Consumption	-0.9	0.2	-0.8	2.5	0.9				
% Change Year Ago	-3.0	6.2	0.3	1.0	2.8	-5.6	1.0	-5.9	2.5
Residential Investment	2.0	4.0	1.0	1.4	0.8				
% Change Year Ago	-3.9	0.5	6.9	8.6	7.3	-6.1	3.0	-6.7	5.8
Nonresidential Investment	-0.2	2.9	-2.9	0.3	0.6				
% Change Year Ago	-5.4	4.6	3.5	-0.1	0.7	-6.3	0.3	-7.3	2.1
Government Consumption	-1.0	1.4	1.9	0.8	0.6				
% Change Year Ago	3.2	4.7	3.4	3.1	4.8	2.3	3.5	2.7	4.0
Public Investment	-0.5	-1.0	-0.7	-1.5	-0.2				
% Change Year Ago	4.0	0.8	-1.5	-3.6	-3.3	4.4	-0.1	4.6	-2.1
Exports of Goods & Services	4.5	6.8	0.4	0.1	0.6				
% Change Year Ago	1.9	36.6	24.6	12.1	8.0	-14.0	17.6	-12.0	19.2
Imports of Goods & Services	10.4	11.3	3.0	2.5	1.5				
% Change Year Ago	-1.7	20.9	32.6	29.7	19.2	-14.0	19.5	-13.3	25.4
Gross National Income	-1.0	-0.2	-0.7	1.2	0.6				
<b>SAAR</b>	<b>-3.8</b>	<b>-0.8</b>	<b>-2.8</b>	<b>5.1</b>	<b>2.2</b>				
% Change Year Ago	-1.5	6.8	0.7	-0.6	0.9	-4.0	1.2	-4.2	1.8
Memo:									
Total Demand	0.4	1.4	-0.1	1.4	0.7				
<b>SAAR</b>	<b>1.5</b>	<b>5.8</b>	<b>-0.2</b>	<b>5.7</b>	<b>2.8</b>				
% Change Year Ago	0.0	17.5	4.4	3.2	3.5	0.0	-5.3	0.0	-5.3
Compensation of Employee	2.6	-1.6	0.5	0.3	0.4				
% Change Year Ago	-0.3	1.9	1.8	1.7	-0.5	-1.5	1.4	-2.0	1.3

**Table 3-3: Deflator : 2015=100**

	Quarterly		Forecast			CY		FY	
	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2020	2021	2020	2021
GDP/GDE									
Gross Domestic Products	101.5	100.9	101.1	100.6	101.0	101.9	101.0	101.8	100.9
Private Consumption	101.4	100.7	101.0	100.7	101.2	101.5	100.9	101.4	100.9
Residential Investment	106.2	108.2	112.3	114.6	114.8	105.3	110.3	105.4	112.5
Nonresidential Investment	101.2	101.9	102.8	103.8	104.4	100.7	102.4	100.7	103.2
Government Consumption	100.3	100.6	101.4	101.6	101.7	100.2	101.0	100.1	101.3
Public Investment	105.4	106.6	107.5	107.9	108.1	104.5	106.8	104.7	107.5
Exports of Goods & Services	93.3	96.5	99.0	100.4	101.1	91.3	97.3	91.5	99.3
Imports of Goods & Services	92.9	98.2	104.0	108.9	109.5	88.6	101.0	88.4	105.2
Unit Profit	103.5	104.5	103.4	103.9	104.5	105.1	103.8	104.7	104.1
Unit Labor Cost	99.9	97.9	99.1	97.8	98.0	99.1	98.7	99.4	98.2
Upper Row : % change from the previous quarter Lower Row : % change from a year earlier									
Gross Domestic Products	-0.1	-0.6	0.1	-0.5	0.4				
	-0.1	-1.1	-1.0	-1.0	-0.6	0.9	-0.8	0.6	-0.9
Private Consumption	0.4	-0.7	0.3	-0.3	0.5				
	-0.5	-0.9	-0.5	-0.3	-0.2	0.2	-0.5	-0.1	-0.5
Residential Investment	1.0	1.9	3.8	2.1	0.1				
	0.3	3.4	6.5	9.0	8.1	1.1	4.8	0.5	6.7
Nonresidential Investment	0.8	0.7	0.9	1.0	0.6				
	-0.2	1.4	2.0	3.5	3.3	-0.3	1.7	-0.5	2.5
Government Consumption	0.7	0.3	0.8	0.2	0.1				
	-0.4	0.6	1.0	2.0	1.4	-0.5	0.8	-0.7	1.2
Public Investment	0.9	1.1	0.8	0.4	0.2				
	0.5	2.3	2.8	3.3	2.6	0.8	2.2	0.4	2.7
Exports of Goods & Services	2.1	3.4	2.6	1.4	0.7				
	0.7	7.8	7.9	9.8	8.4	-2.6	6.6	-1.8	8.5
Imports of Goods & Services	6.2	5.7	5.9	4.8	0.5				
	-1.2	14.9	18.8	24.5	17.8	-7.3	14.0	-6.9	19.0
Unit Profit	0.0	1.0	-1.1	0.5	0.6				
	0.0	4.1	-2.6	-3.6	1.0	-1.6	-1.2	-1.5	-0.6
Unit Labor Cost	0.0	-2.0	1.3	-1.4	0.2				
	0.0	11.7	0.4	1.5	-1.9	3.2	-0.4	2.5	-1.2