



# Japanese Economy Monthly Forecast

September 2022

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## Headlines

### ● Review of data released in September

▶ This forecast reflects data released by the end of September. With the exception of private household consumption and public investment, two-thirds of official data required for an accurate estimation of 2022 Q3 GDP have been updated.

▶ According to the Bank of Japan's Tankan Survey for September, business confidence in the large manufacturing sector deteriorated due to the accelerating depreciation of the yen and the conflict in Ukraine, which led to higher prices for resources and raw materials. In contrast, business confidence in the large non-manufacturing sector improved due to the absence of restraints on economic activities during the survey period.

▶ In August, the Index of Industrial Production rose +2.7% MoM, marking the third consecutive monthly increase. The July-August average rose 5.5% over the Q2 average. As a result, METI raised its assessment of the production from the previous month.

▶ The real total consumption trend index and the real consumption activity index both fell MoM in July, marking the first decline in five months.

▶ Planned residential construction expenditure in August increased MoM the second month in a row. The capital goods shipments index rose for the third consecutive month. The July-August averages were respectively +2.9% and +12.9% higher relative to the Q2 average.

▶ Comparing the July-August average with the Q2 average, the Ministry of Finance's export volume index fell by -1.8%, while the import volume index rose by +2.2%. On the other hand, according to the Bank of Japan, exports rose by +2.7%, and imports by +2.8% in real terms. Despite the different figures, both indicators suggest that the contribution of net exports to GDP growth in July-August was negative both in volume terms and in real terms.

### ● 2022 Q3 real GDP growth forecast update

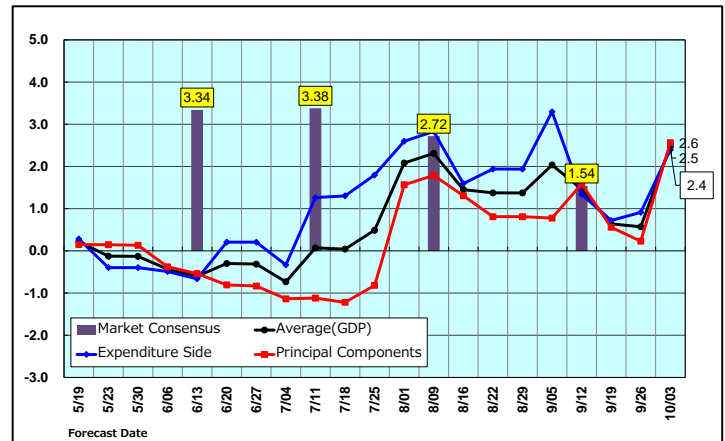
▶ Our expenditure-side forecast for real GDP growth in 2022 Q3 is an annualized +2.4% QoQ. The production-side forecast figure is an annualized +2.6%. The average of the two is an annualized 2.5% (Figure 1). Our forecast is higher than the market consensus forecast of +1.54% (September ESP forecast survey).

### ● 2022 Q3 inflation forecast update

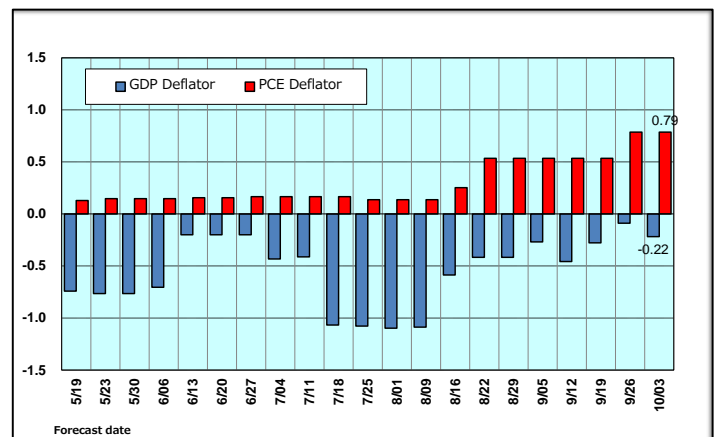
▶ In August, the National Consumer Price Index (CPI) rose +3.0% YoY, marking the 12th consecutive monthly increase. The core index (excl. fresh food) duplicated this trend, rising +2.8%.

▶ Our CQM forecasts for the private final consumption expenditure deflator and the domestic demand deflator in 2022 Q3 are +0.8% and +0.7% QoQ, respectively. However, as the terms of trade are deteriorating, we forecast a GDP deflator of -0.2% QoQ (Figure 2).

**Fig 1 CQM Forecast: Real GDP Growth Rate Jul-Sep (Q3) 2022 (% , QoQ annualized growth)**



**Fig 2 CQM Forecast: Inflation Jul-Sep (Q3) 2022 (% , 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	
9/30	August	<b>Labor Force Survey</b>				
		Total employment (millions)	67.30	-0.04		
		Total unemployment (millions)	1.75	-0.01		
			Unemployment rate (%)	2.5%	-0.1%pt	
	August	<b>General Job Placement Situation</b>				
		Job offers-to-applicants ratio	1.32	+0.03%pt		
	August	<b>Indices of Industrial Production (preliminary figures, 2015=100)</b>				
		Production	99.5	+2.7%		
		Shipments	96.6	+1.9%		
		Inventories	101.6	+1.4%		
	August	<b>Current Survey of Commerce (preliminary figures)</b>				
		Retail trade (billion JPY)	12,521.0	+1.4%	+4.1%	
	August	<b>New Housing Starts</b>				
		New housing starts (SA, Unit)	77,712	+9.4%	+4.6%	
	Planned residential construction expenditure (billion JPY)	1,337.4	+3.5%	+3.2%		
July	<b>Construction Costs Deflator (2015=100)</b>					
	Housing construction	119.9		+6.5%		
	Public works	116.2		+5.0%		
September	<b>Consumer Confidence Index (SA)</b>	30.8	-1.7			
9/28	July	<b>Index of Business Conditions (revised figures, 2015=100)</b>				
		Leading indicators	98.9	-1.4		
		Coincident indicators	100.1	+0.9		
		Lagging indicators	97.4	-0.2		
	August	<b>Producer Price Index for Final Demand (2015=100)</b>				
	Capital goods	102.7		+2.6%		
	Consumer goods	108.7		+6.0%		
9/27	July	<b>Monthly Labor Statistics (final figures)</b>				
		Total cash salary per capita (JPY)	376,028		+1.3%	
		Total working hours	139.9		-0.1%	
August	<b>Corporate Services Price Index (2015=100)</b>					
	Overall index	107.1		+1.9%		
9/20	August	<b>National Consumer Price Index (2020=100)</b>				
		Core index	102.5	+0.4%	+2.8%	
	July	<b>General Construction Statistics</b>				
		Private non-residential construction (billion JPY)	877.5		+11.0%	
	Public works (billion JPY)	1,558.2		-3.5%		
9/15	July	<b>Tertiary Industry Activity Index (2015=100)</b>	99.2	-0.6%		
	August	<b>Public Works Advanced Securities Statistics</b>				
		Contract amount (billion JPY)	1,156.2		-0.1%	
		Number of contracts	23,222		+3.3%	
	August	<b>Trade Statistics (customs clearance level)</b>				
		Trade balance (billion JPY)	-2,817.3	+10.0%	+331.2%	
	Exports (billion JPY)	8,061.9	-0.7%	+22.1%		

		Imports (billion JPY)	10,879.2	+1.5%	+49.9%
9/14	July	<b>Indices of Industrial Production (final figures, 2015=100)</b>			
		Production	96.9	+0.8%	
		Shipments	94.8	+1.2%	
		Inventory	100.2	+0.6%	
		Production capacity index	95.2		-1.3%
		Capacity utilization ratio	94.5	+2.4%	
	July	<b>Private Core Machinery Orders (billion JPY)</b>	966.0	+5.3%	
9/13	August	<b>Domestic Corporate Price Index (2015=100)</b>			
		Corporate Price	115.1	+0.2%	+9.0%
		Export Price	127.9	-2.3%	+17.0%
		Import Price	178.7	-2.3%	+42.5%
9/9	July	<b>Information Services Industry Sales (billion JPY)</b>	1,099.8		+8.0%
9/8	August	<b>Economy Watchers Survey</b>			
		Current Conditions Diffusion Index	45.5	+1.7	
		Future Conditions Diffusion Index	49.4	+6.6	
	July	<b>Balance of Payments</b>			
		Current account (billion JPY)	229.0	-1,467.3	-86.6%
		Exports (billion JPY)	8,583.8	+0.8%	+18.5%
		Imports (billion JPY)	9,795.9	+2.9%	+47.6%
9/7	July	<b>Consumption Activity Index (2015=100)</b>	96.6	-0.4%	
	July	<b>Index of Business Conditions (preliminary, 2015=100)</b>			
		Leading indicators	99.6	-0.7	
		Coincident indicators	100.6	+1.4	
		Lagging indicators	97.5	0.0	
9/6	July	<b>Monthly Labor Statistics (preliminary figures)</b>			
		Total cash salary per capita (JPY)	377,809		+1.8%
		Total working hours	139.8		-0.2%
	July	<b>Family Income and Expenditure Survey (households with 2 or more people)</b>			
		Nominal consumption expenditure (JPY)	285,313	-1.0%	+6.6%
		Real consumption expenditure		-1.4%	+3.4%
	July	<b>Consumption Trend Index (2020=100)</b>	104.1	-0.1%	
	June	<b>Synthetic Consumption Index (2015=100)</b>	98.7	+0.4%	
9/2	August	<b>Food Buffer Stock (billion JPY)</b>	76.3		+8.9
9/1	September	<b>New Car Sales (vehicles)</b>	234,143		-11.2%
8/26	August	<b>Tokyo Region Consumer Price Index (2020=100)</b>			
		Core	102.4	+0.4%	+2.6%

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
	2022Q2			2022Q3			2022Q4			2022Q4			2022Q4		
	SAAR (%)			QoQ (%)		SAAR (%)			QoQ (%)		SAAR (%)			QoQ (%)	
5/19	2.7	2.6	2.7	-2.2	-0.6	0.3	0.1	0.2	-0.7	0.1					
5/23	0.2	3.3	1.8	-1.4	0.6	-0.4	0.1	-0.1	-0.8	0.1					
5/30	0.2	3.4	1.8	-1.4	0.6	-0.4	0.1	-0.1	-0.8	0.1					
6/06	-0.4	2.6	1.1	-1.3	0.5	-0.5	-0.4	-0.4	-0.7	0.1					
6/08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
6/13	0.8	2.7	1.7	-0.8	0.5	-0.7	-0.5	-0.6	-0.2	0.2					
6/20	0.7	3.2	1.9	-0.9	0.5	0.2	-0.8	-0.3	-0.2	0.2					
6/27	0.7	3.3	2.0	-0.9	0.5	0.2	-0.8	-0.3	-0.2	0.2					
7/04	0.7	2.4	1.6	-1.1	0.5	-0.3	-1.1	-0.7	-0.4	0.2					
7/11	1.0	2.5	1.8	-1.1	0.5	1.3	-1.1	0.1	-0.4	0.2					
7/18	0.8	2.4	1.6	-1.3	0.5	1.3	-1.2	0.0	-1.1	0.2					
7/25	1.2	2.1	1.6	-1.3	0.5	1.8	-0.8	0.5	-1.1	0.1					
8/01	1.4	3.5	2.4	-1.3	0.5	2.6	1.6	2.1	-1.1	0.1					
8/09	3.0	4.2	3.6	-1.3	0.5	2.8	1.8	2.3	-1.1	0.1					
8/15	<b>2.2</b>			<b>-0.3</b>	<b>1.1</b>										
8/16						1.6	1.3	1.5	-0.6	0.3	1.8	1.5	1.7	-0.2	-0.3
8/22						1.9	0.8	1.4	-0.4	0.5	1.9	1.5	1.7	-0.2	-0.3
8/29						1.9	0.8	1.4	-0.4	0.5	1.9	1.5	1.7	-0.2	-0.3
9/05						3.3	0.8	2.0	-0.3	0.5	1.9	1.1	1.5	-0.2	-0.3
9/08	<b>3.5*</b>			<b>-0.2*</b>	<b>1.1*</b>										
9/12						1.3	1.6	1.5	-0.5	0.5	1.9	1.1	1.5	-0.2	-0.3
9/19						0.7	0.6	0.6	-0.3	0.5	1.6	0.6	1.1	0.2	-0.3
9/26						0.9	0.2	0.6	-0.1	0.8	1.6	0.4	1.0	0.3	-0.1
10/03						2.4	2.6	2.5	-0.2	0.8	1.7	1.8	1.8	0.2	-0.1

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	
	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2021	2022	2021	2022
GDP/GDE									
Gross Domestic Products	539,095	539,376	544,022	547,252	549,571	535,989	545,055	536,862	547,908
Private Consumption	293,037	293,885	297,335	298,267	298,687	288,927	297,044	290,366	298,348
Residential Investment	18,358	18,096	17,758	17,567	17,907	18,633	17,832	18,496	17,833
Nonresidential Investment	83,415	83,304	84,987	87,712	88,427	83,919	86,107	83,692	87,449
Change in Private Inventory	153	3,094	1,614	1,675	1,617	-171	2,000	1,013	1,600
Government Consumption	116,026	116,487	117,307	117,853	118,372	115,419	117,505	116,021	118,107
Public Investment	26,908	26,045	26,297	27,044	27,264	28,352	26,663	27,309	26,962
Change in Public Inventory	5	-15	-46	-26	13	-19	-19	-15	-12
Net Exports	1,535	-1,120	-750	-2,359	-2,236	1,110	-1,616	438	-1,897
Exports of Goods & Services	103,982	104,900	105,854	109,224	109,732	102,691	107,428	103,837	108,741
Imports of Goods & Services	102,447	106,021	106,604	111,583	111,968	101,581	109,044	103,399	110,638
Gross National Income	551,891	552,028	552,858	551,224	555,574	552,341	552,921	551,263	554,252
Memo:									
Total Demand	641,542	645,396	650,626	658,835	661,539	637,570	654,099	640,260	658,546
Upper Row : % change from the previous quarter Lower Row : % change from a year earlier									
Gross Domestic Products	1.0	0.1	0.9	0.6	0.4				
<b>SAAR</b>	<b>3.9</b>	<b>0.2</b>	<b>3.5</b>	<b>2.4</b>	<b>1.7</b>				
% Change Year Ago	0.5	0.9	1.4	2.5	1.9	1.7	1.7	2.3	2.1
Private Consumption	2.4	0.3	1.2	0.3	0.1				
% Change Year Ago	1.3	2.2	3.0	4.3	1.9	1.3	2.8	2.6	2.7
Residential Investment	-1.3	-1.4	-1.9	-1.1	1.9				
% Change Year Ago	-0.9	-3.0	-6.3	-5.6	-2.5	-1.9	-4.3	-1.6	-3.6
Nonresidential Investment	0.2	-0.1	2.0	3.2	0.8				
% Change Year Ago	0.0	-1.0	0.0	5.3	6.0	-0.9	2.6	0.6	4.5
Government Consumption	-0.3	0.4	0.7	0.5	0.4				
% Change Year Ago	0.9	2.1	1.9	1.3	2.0	2.1	1.8	2.0	1.8
Public Investment	-3.7	-3.2	1.0	2.8	0.8				
% Change Year Ago	-9.4	-12.2	-9.0	-3.3	1.3	-2.6	-6.0	-7.5	-1.3
Exports of Goods & Services	0.6	0.9	0.9	3.2	0.5				
% Change Year Ago	6.0	4.6	2.5	5.7	5.5	11.8	4.6	12.5	4.7
Imports of Goods & Services	0.4	3.5	0.6	4.7	0.3				
% Change Year Ago	5.6	7.3	3.3	9.4	9.3	5.1	7.3	7.2	7.0
Gross National Income	0.7	0.0	0.2	-0.3	0.8				
<b>SAAR</b>	<b>2.8</b>	<b>0.1</b>	<b>0.6</b>	<b>-1.2</b>	<b>3.2</b>				
% Change Year Ago	-1.7	-0.6	-0.3	0.6	0.7	0.5	0.1	0.7	0.5
Total Demand	0.9	0.6	0.8	1.3	0.4				
<b>SAAR</b>	<b>3.5</b>	<b>2.4</b>	<b>3.3</b>	<b>5.1</b>	<b>1.7</b>				
% Change Year Ago	0.0	11.0	1.7	3.6	3.1	2.2	2.6	3.0	2.9
Contribution to GDP Growth Rate									
Domestic Demand	0.9	0.5	0.8	0.9	0.4	0.6	2.2	1.5	2.5
Private Demand	1.2	0.6	0.6	0.6	0.3	0.3	2.2	1.5	2.2
Public demand	-0.3	-0.1	0.2	0.2	0.1	0.3	0.1	0.0	0.3
Net Exports	0.0	-0.5	0.1	-0.3	0.0	1.0	-0.5	0.8	-0.4

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

	Quarterly			Forecast		CY		FY		
	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2021	2022	2021	2022	
GDP/GDE										
Gross Domestic Products	541,857	544,114	547,472	549,471	552,992	541,369	548,513	541,581	551,148	
Private Consumption	295,971	299,392	306,250	309,637	309,645	291,932	306,231	293,818	308,981	
Residential Investment	21,104	21,101	20,996	20,970	21,191	20,618	21,065	20,921	21,091	
Nonresidential Investment	86,313	87,009	89,912	93,915	95,229	85,787	91,516	86,327	93,769	
Change in Private Inventory	-203	2,532	1,808	1,743	1,303	-407	1,847	581	1,413	
Government Consumption	116,933	118,480	118,571	119,424	119,884	116,150	119,090	117,185	119,573	
Public Investment	29,329	28,713	29,354	30,145	30,261	30,361	29,618	29,594	29,996	
Change in Public Inventory	14	-3	-88	-48	-16	-39	-39	-21	-42	
Net Exports	-7,603	-13,110	-19,330	-26,314	-24,506	-3,033	-20,815	-6,824	-23,633	
Exports of Goods & Services	105,808	109,376	116,804	122,646	123,016	100,041	117,960	103,698	121,875	
Imports of Goods & Services	113,412	122,486	136,134	148,960	147,522	103,073	138,775	110,521	145,507	
Gross National Income	563,808	568,256	572,686	573,479	577,917	562,015	573,085	563,314	576,003	
Memo:										
Total Demand	655,269	666,600	683,606	698,431	700,514	644,442	687,288	652,102	696,655	
Compensation of Employee	288,279	291,028	292,248	291,537	291,497	288,104	291,578	288,703	291,775	
	Upper Row : % change from the previous quarter					Lower Row : % change from a year earlier				
Gross Domestic Products	0.4	0.4	0.6	0.4	0.6					
<b>SAAR</b>	<b>1.8</b>	<b>1.7</b>	<b>2.5</b>	<b>1.5</b>	<b>2.6</b>					
% Change Year Ago	-0.8	0.2	1.1	1.8	2.1	0.8	1.3	1.3	1.8	
Private Consumption	2.2	1.2	2.3	1.1	0.0					
% Change Year Ago	1.2	2.8	5.4	6.9	4.6	0.8	4.9	2.4	5.2	
Residential Investment	1.0	0.0	-0.5	-0.1	1.1					
% Change Year Ago	8.6	6.2	2.1	0.3	0.4	3.1	2.2	5.6	0.8	
Nonresidential Investment	1.0	0.8	3.3	4.5	1.4					
% Change Year Ago	2.9	2.2	3.9	9.9	10.3	0.6	6.7	3.1	8.6	
Government Consumption	-0.8	1.3	0.1	0.7	0.4					
% Change Year Ago	2.1	3.7	2.5	1.3	2.5	2.6	2.5	3.1	2.0	
Public Investment	-2.5	-2.1	2.2	2.7	0.4					
% Change Year Ago	-5.5	-8.4	-4.3	0.2	3.2	-0.3	-2.4	-4.3	1.4	
Exports of Goods & Services	4.8	3.4	6.8	5.0	0.3					
% Change Year Ago	18.2	15.7	18.2	21.5	16.3	19.3	17.9	22.9	17.5	
Imports of Goods & Services	7.2	8.0	11.1	9.4	-1.0					
% Change Year Ago	34.8	32.8	35.2	40.8	30.1	20.9	34.6	30.3	31.7	
Gross National Income	0.7	0.8	0.8	0.1	0.8					
<b>SAAR</b>	<b>2.8</b>	<b>3.2</b>	<b>3.2</b>	<b>0.6</b>	<b>3.1</b>					
% Change Year Ago	-0.4	0.9	1.9	2.4	2.5	0.9	2.0	1.7	2.3	
Memo:										
Total Demand	1.5	1.7	2.6	2.2	0.3					
<b>SAAR</b>	<b>6.3</b>	<b>7.1</b>	<b>10.6</b>	<b>9.0</b>	<b>1.2</b>					
% Change Year Ago	0.0	21.2	6.5	8.2	6.9	0.0	3.5	0.0	5.3	
Compensation of Employee	0.0	1.0	0.4	-0.2	0.0					
% Change Year Ago	1.2	0.8	1.6	1.2	1.1	1.7	1.2	1.8	1.1	

Table 3-3: Deflator : 2015=100

	Quarterly		Forecast			CY		FY	
	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2021	2022	2021	2022
GDP/GDE									
Gross Domestic Products	100.5	100.9	100.6	100.4	100.6	101.0	100.6	100.9	100.6
Private Consumption	101.0	101.9	103.0	103.8	103.7	101.0	103.1	101.2	103.6
Residential Investment	115.0	116.6	118.2	119.4	118.3	110.6	118.1	113.1	118.3
Nonresidential Investment	103.5	104.5	105.8	107.1	107.7	102.3	106.3	103.1	107.2
Government Consumption	100.8	101.7	101.1	101.3	101.3	100.6	101.4	101.0	101.2
Public Investment	109.0	110.3	111.6	111.5	111.0	107.1	111.1	108.2	111.3
Exports of Goods & Services	101.8	104.3	110.3	112.3	112.1	97.4	109.8	99.8	112.1
Imports of Goods & Services	110.7	115.5	127.7	133.5	131.8	101.4	127.1	106.8	131.5
Unit Profit	102.1	101.8	101.8	102.3	103.2	102.5	102.3	102.2	102.7
Unit Labor Cost	99.2	100.1	99.7	98.9	98.4	99.7	99.3	99.8	98.8
Upper Row : % change from the previous quarter Lower Row : % change from a year earlier									
Gross Domestic Products	-0.5	0.4	-0.2	-0.2	0.2				
	-1.3	-0.7	-0.3	-0.6	0.1	-0.9	-0.4	-1.0	-0.3
Private Consumption	-0.2	0.9	1.1	0.8	-0.1				
	-0.1	0.6	2.3	2.5	2.6	-0.5	2.0	-0.2	2.4
Residential Investment	2.3	1.4	1.4	1.0	-0.9				
	9.5	9.5	8.9	6.3	2.9	5.0	6.8	7.3	4.6
Nonresidential Investment	0.8	0.9	1.3	1.2	0.6				
	2.9	3.3	3.9	4.3	4.1	1.5	3.9	2.4	4.0
Government Consumption	-0.5	0.9	-0.6	0.3	-0.1				
	1.2	1.6	0.7	0.1	0.5	0.5	0.7	1.1	0.2
Public Investment	1.3	1.2	1.3	-0.1	-0.4				
	4.3	4.3	5.2	3.6	1.8	2.5	3.7	3.4	2.8
Exports of Goods & Services	4.1	2.5	5.8	1.8	-0.2				
	11.5	10.6	15.3	14.9	10.2	6.8	12.7	9.4	12.3
Imports of Goods & Services	6.8	4.4	10.5	4.5	-1.3				
	27.6	23.7	30.9	28.8	19.0	14.9	25.4	21.6	23.1
Unit Profit	0.0	-0.2	0.0	0.5	1.0				
	0.0	1.4	-0.8	0.1	1.2	-1.9	-0.2	-1.5	0.5
Unit Labor Cost	0.0	0.9	-0.4	-0.8	-0.4				
	0.0	14.2	0.1	-1.3	-0.8	0.0	-0.5	-0.5	-1.0