

## Charts

### Speech at a Meeting with Business Leaders in Oita

Chart 1: Bank of Japan's Responses to the Tohoku-Pacific Ocean Earthquake

Chart 2: Developments in Japan's Real GDP

Chart 3: Developments in U.S. Real GDP

Chart 4: U.S. Private Consumption

Chart 5: U.S. Housing Sales

Chart 6: U.S. Employment Environment

Chart 7: U.S. Inflation Expectations

Chart 8: U.S. Household Survey

Chart 9: Developments in Commodity Prices

Chart 10: Developments in China's Major Economic Indicators

Chart 11: Developments in Real GDP in Major Asian Countries

Chart 12: Policy Rates and Inflation Developments in Asian Countries

Chart 13: Developments in Real GDP in the Euro Area

Chart 14: Developments in Japan's Industrial Production

Chart 15: U.S. Dollar/Yen Exchange Rate and Nikkei 225 Stock Average

Chart 16: Fixed Investment by Manufacturing Firms

Chart 17: Indicators Related to Private Consumption in Japan

Chart 18: Indicators Related to Employment and Income in Japan

Chart 19: Japan's Output Gap and CPI

Chart 20: Transmission of Net Export Expansion to Gross Domestic Income

Chart 21: U.S. and Asian Policy Rates

Note: Charts are based on data released prior to March 18, 2011.

Chart 1: Bank of Japan's Responses to the Tohoku-Pacific Ocean Earthquake

- Organizing a disaster management team on March 11 (Fri.)
- Providing cash through the Bank's branches and local offices in the Tohoku region
  - March 12 (Sat.) and 13 (Sun.): 55 billion yen
  - March 14 (Mon.) through 18 (Fri.): 256 billion yen
- Ensuring the smooth operation of the BOJ-NET
- Providing ample liquidity to the money market

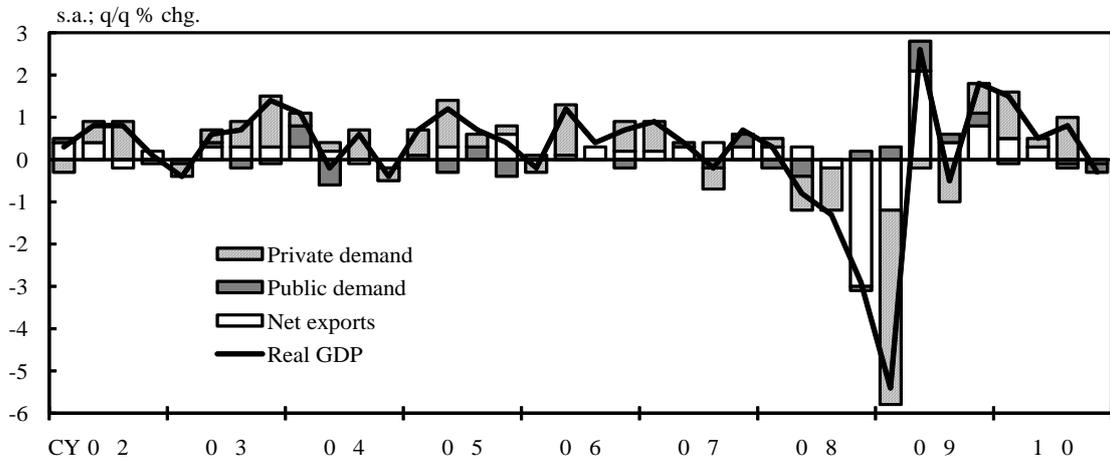
Funds-Supplying Operations

				bil. yen
	Type	Amounts offered	Amounts of competitive bid	Amounts of successful bid
March 14 (Mon.)	Same-day	15,000	8,926.2	8,926.2
	Future-day-start	6,800	10,875.9	6,156.5
March 15 (Tue.)	Same-day	8,000	5,380.8	5,380.8
	Future-day-start	12,000	10,526.4	9,573.7
March 16 (Wed.)	Same-day	5,000	2,762.4	2,762.4
	Future-day-start	8,800	9,292.5	5,981.0
March 17 (Thurs.)	Same-day	6,000	1,622.0	1,622.0
	Future-day-start	9,660	14,661.8	8,676.0
March 18 (Fri.)	Same-day	4,000	1,977.0	1,977.0
	Future-day-start	7,150	8,320.4	6,707.7
March 14-18	Total	82,410	74,345.4	57,763.3

- Further strengthening monetary easing
  - ▼Increasing the amount of the Asset Purchase Program by 5 trillion yen (about 35 trillion yen → about 40 trillion yen)
    - The breakdown of 5 trillion yen is 3.5 trillion yen for risk assets (CP, corporate bonds, ETFs, and J-REITs) and 1.5 trillion yen for long-term and short-term government securities.

Chart 2: Developments in Japan's Real GDP

A. Real GDP



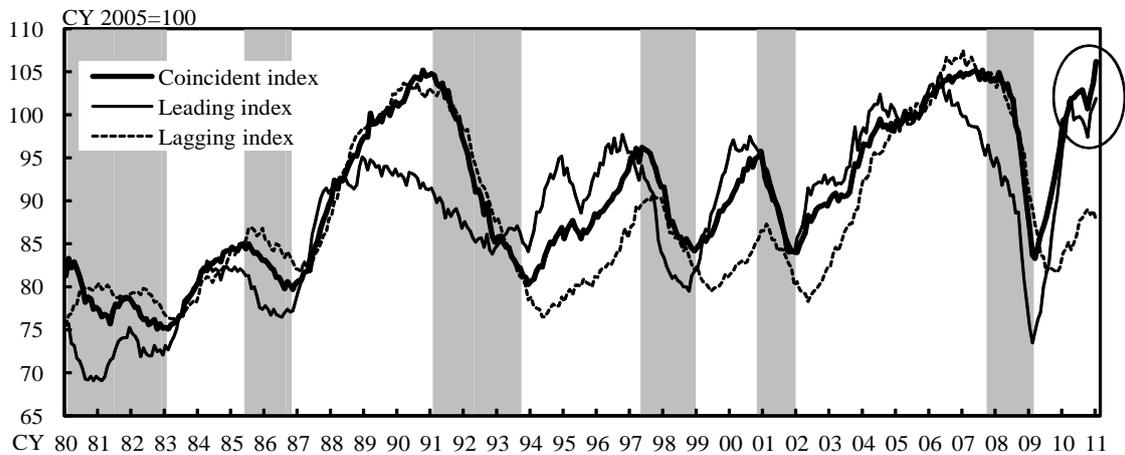
B. Components

s.a.: q/q % chg.

	2009	2010			
	Q4	Q1	Q2	Q3	Q4
Real GDP	1.8	1.5	0.5	0.8	-0.3
Domestic demand	1.0	1.0	0.3	1.0	-0.2
Private demand	0.7	1.1	0.2	1.0	-0.0
Private consumption	0.6	0.3	-0.0	0.5	-0.5
Non-Resi. investment	0.2	0.1	0.4	0.2	0.1
Residential investment	-0.1	0.0	-0.0	0.0	0.1
Private inventory	0.0	0.7	-0.1	0.3	0.3
Public demand	0.3	-0.1	0.0	-0.1	-0.2
Public investment	0.1	-0.1	-0.2	-0.1	-0.2
Net exports of goods and services	0.8	0.5	0.3	-0.1	-0.1
Exports	0.9	0.9	0.8	0.2	-0.1
Imports	-0.2	-0.4	-0.5	-0.4	0.0
Nominal GDP	0.9	1.7	-0.6	0.6	-0.7

Note: Figures of components in real GDP indicate contributions to changes in GDP.

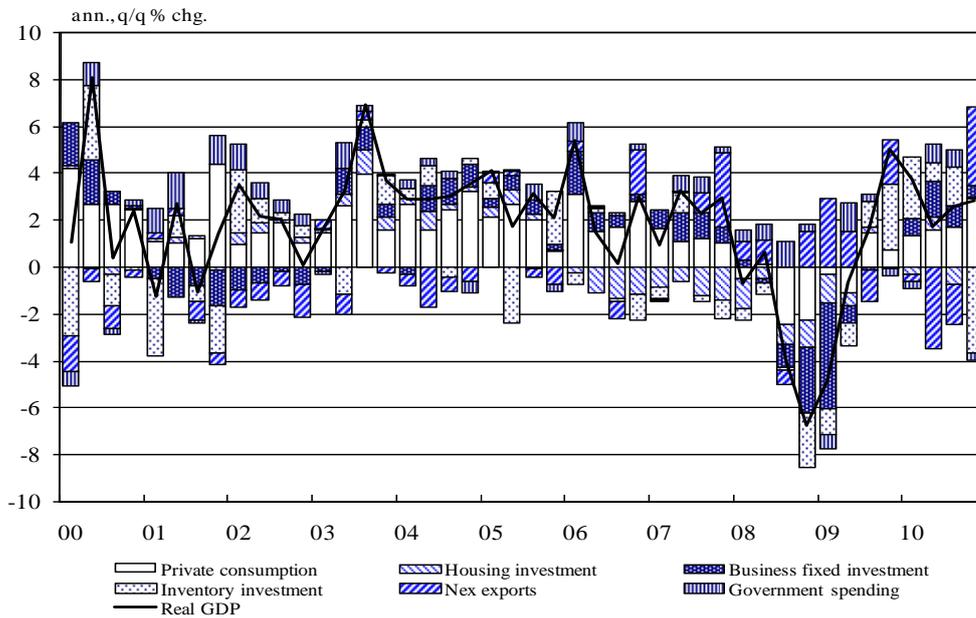
C. Indexes of Business Conditions (Composite Indexes)



Note: Shaded areas indicate recession periods.

Source: Cabinet Office, "National Accounts," "Indexes of Business Conditions."

Chart 3: Developments in U.S. Real GDP

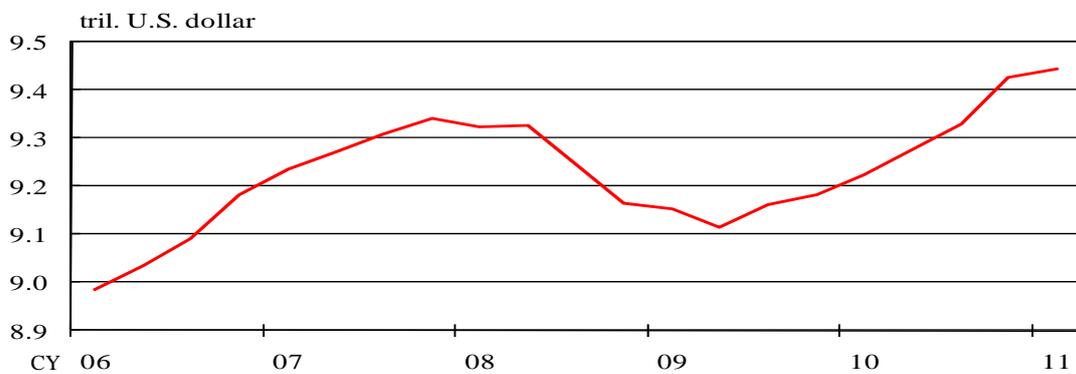


real, ann., %; figures in parentheses: q/q chg., billion U.S. doll

	2010-weighted	Annualized quarter-on-quarter percent changes							
		2010	10/2Q	3Q	4Q	2010	10/2Q	3Q	4Q
Real GDP	100	2.8	1.7	2.6	2.8	2.8	1.7	2.6	2.8
Private consumption	71	1.3	1.5	1.7	2.9	1.8	2.2	2.4	4.1
Housing investment	2	- 0.1	0.6	- 0.8	0.1	- 3.0	25.7	-27.3	2.8
Business fixed investment	10	0.5	1.5	0.9	0.5	5.6	17.2	10.0	5.3
Inventory investment	0	1.4	0.8	1.6	- 3.7	( 173.5)	( 24.7)	( 52.6)	(-114.3)
Net exports	- 4	- 0.5	- 3.5	- 1.7	3.4	(-58.8)	(-110.6)	(-56.0)	( 110.0)
Exports	13	1.4	1.1	0.8	1.2	11.8	9.1	6.8	9.6
Imports	16	- 1.8	- 4.6	- 2.5	2.2	12.7	33.5	16.8	-12.4
Government spending	20	0.2	0.8	0.8	- 0.3	1.0	3.9	3.9	- 1.5
Final demand	100	1.5	0.9	1.0	6.5	1.4	0.9	0.9	6.7

Note: Final demand represents real GDP minus inventory investment.  
Source: BEA, "National Income and Product Accounts."

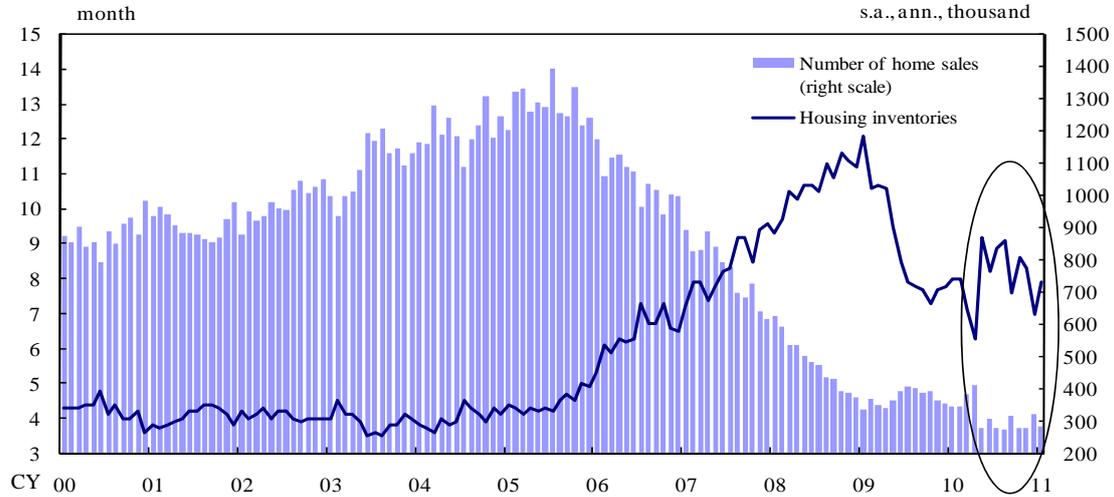
Chart 4: U.S. Private Consumption



Source: BEA, "National Income and Product Accounts."

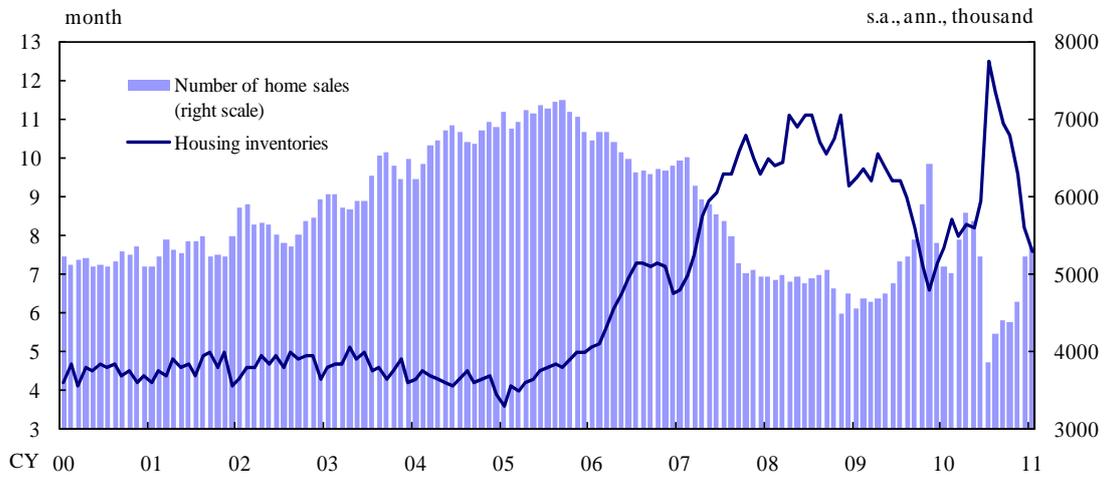
## Chart 5: U.S. Housing Sales

### A. New single-family home sales and housing inventories



Note: Housing inventories represent the number of month-end inventories minus the number of home sales during the month.

### B. Existing home sales and housing inventories

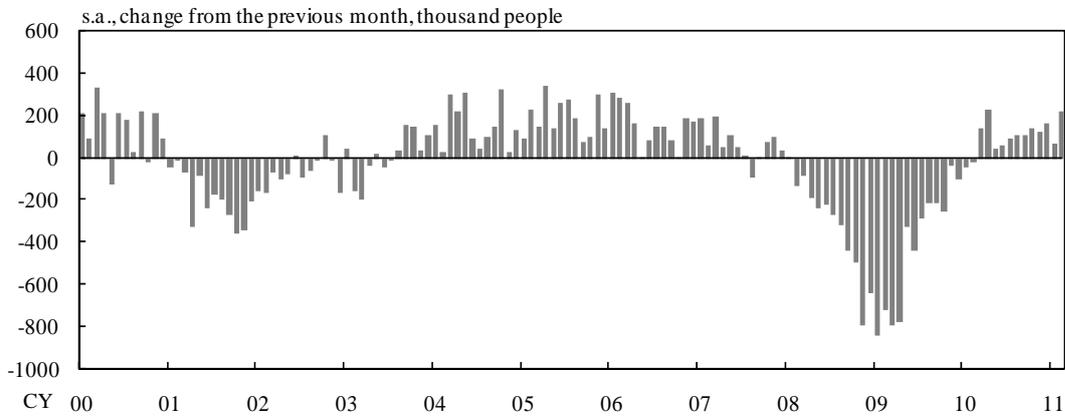


Notes: 1. Housing inventories represent the number of month-end inventories minus the number of home sales during the month.  
2. Existing home sales include both single-family and multiple-family houses.

Source: Bloomberg.

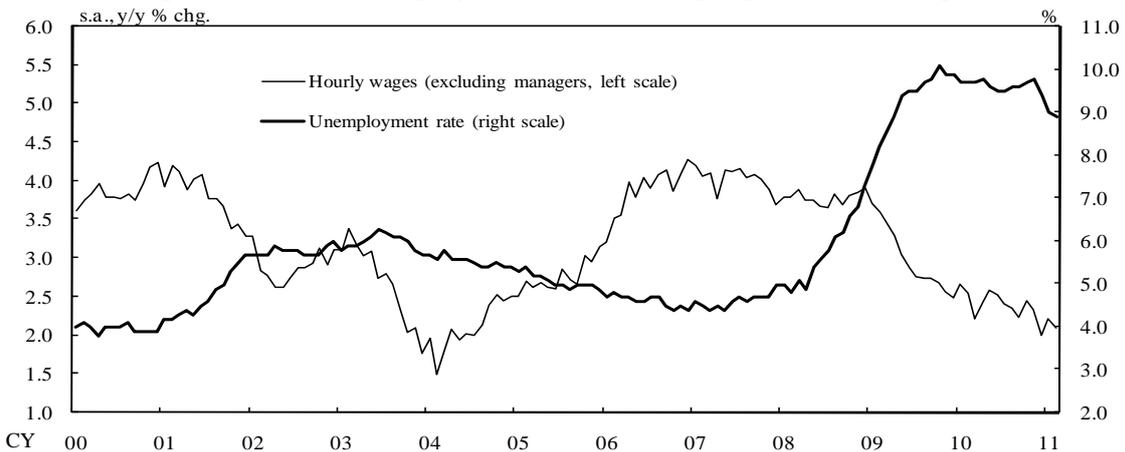
## Chart 6: U.S. Employment Environment

### A. Developments in the number of employees in the private sector



Note: The latest data are as of February 2011.

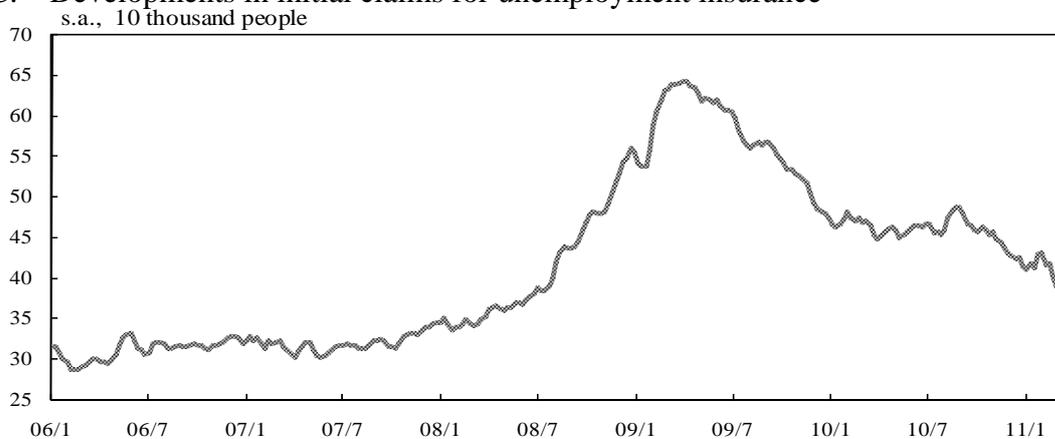
### B. Developments in the unemployment rate and wages per hour in the private sector



Note: The latest data are as of February 2011.

Source: U.S. Bureau of Labor Statistics, "The Unemployment Situation."

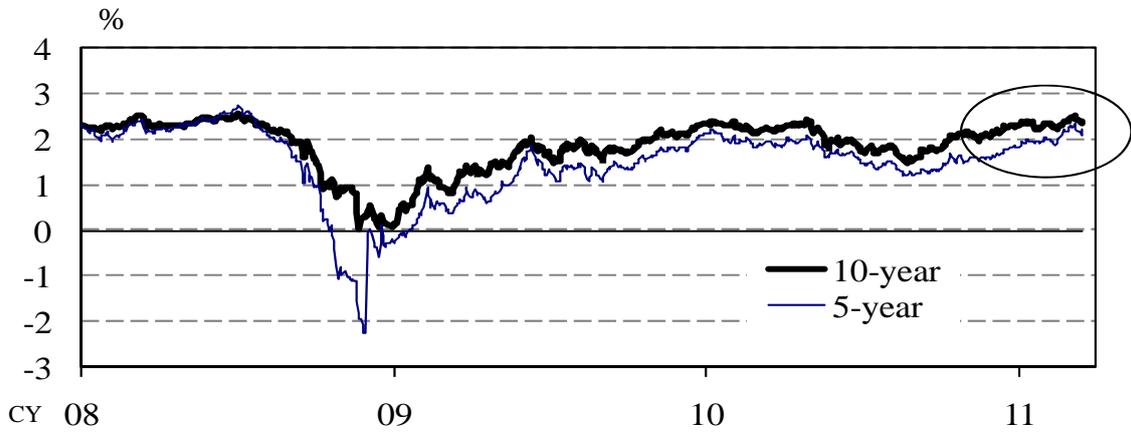
### C. Developments in initial claims for unemployment insurance



Note: 4-week moving averages. The latest data are as of the week ending March 12.

Source: U.S. Bureau of Labor Statistics, "Unemployment Insurance Weekly Claims Report."

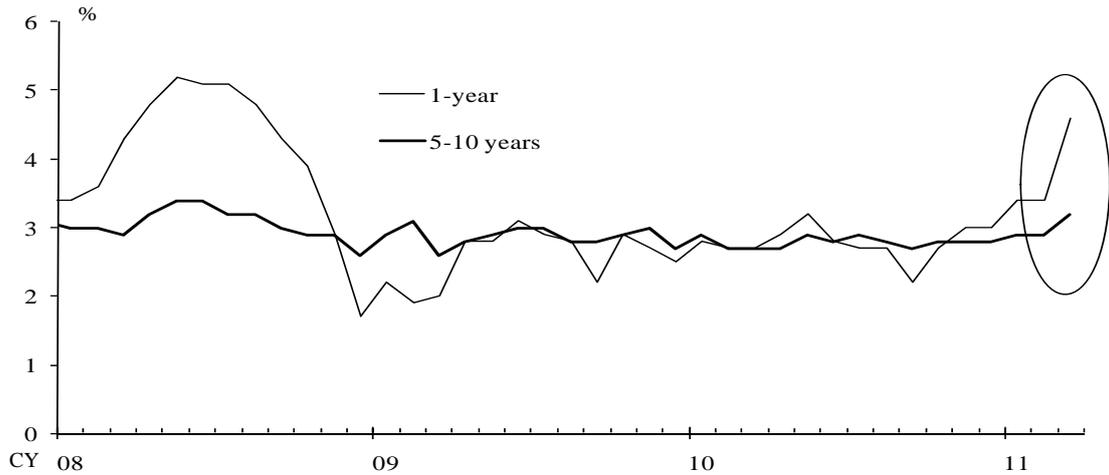
Chart 7: U.S. Inflation Expectations: 5-Year and 10-Year BEI



Note: BEI stands for Break Even Inflation, which is the indicator for market inflation expectations.  
Source: Bloomberg.

Chart 8: U.S. Household Survey: University of Michigan Survey

A. Expected inflation rates



B. Consumer sentiment

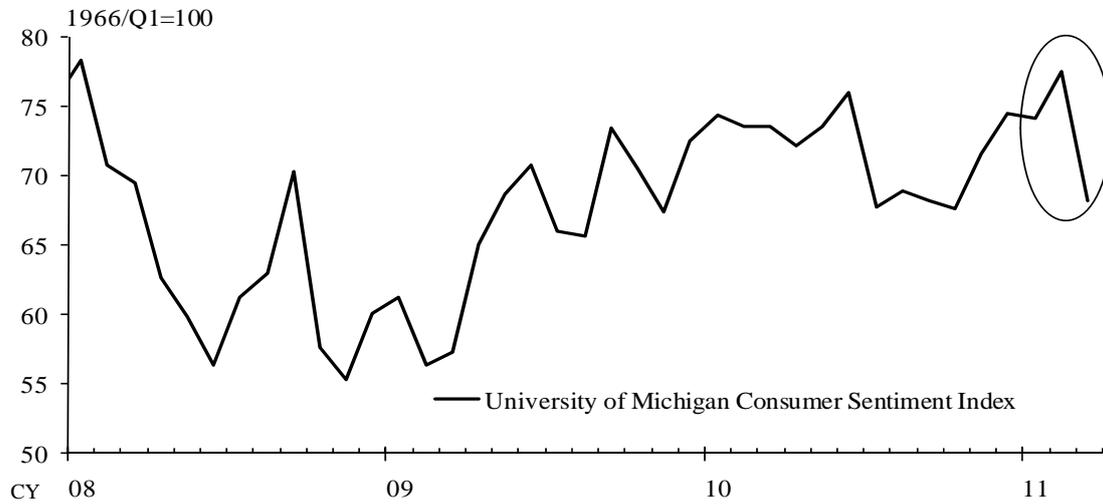
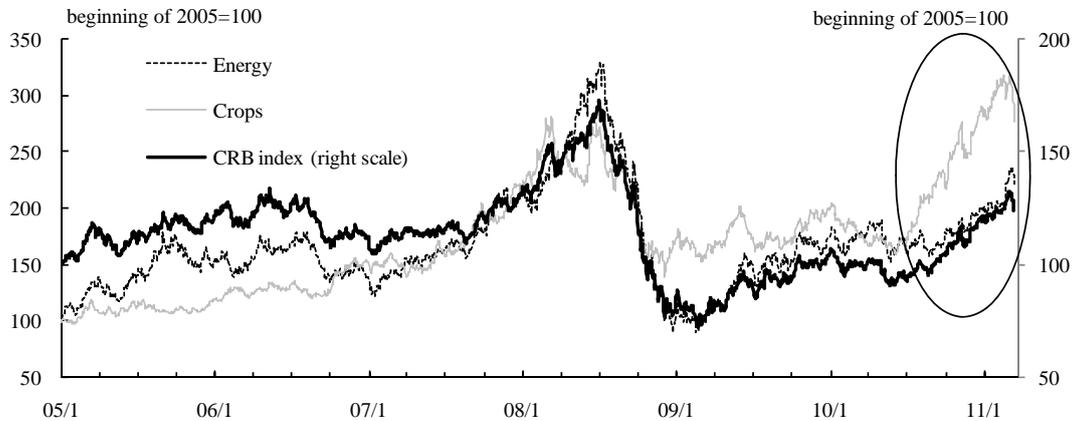


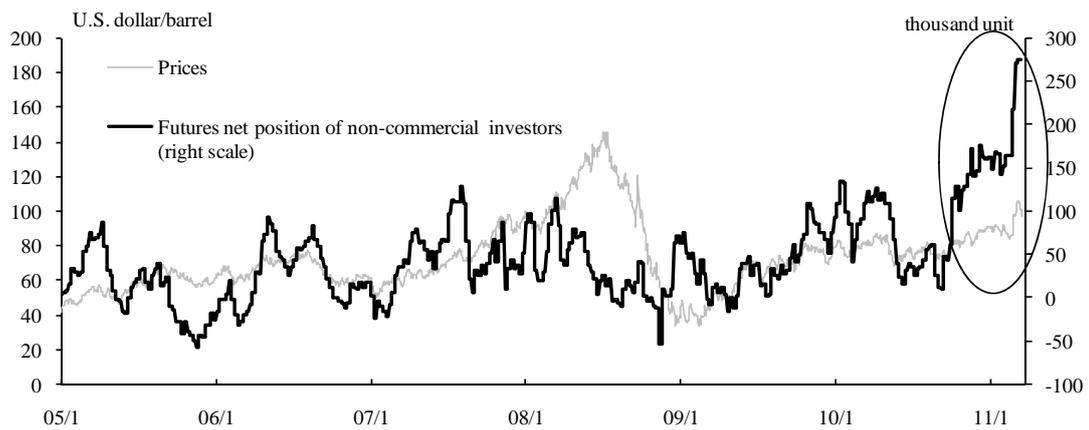
Chart 9: Developments in Commodity Prices

A. Commodity indices

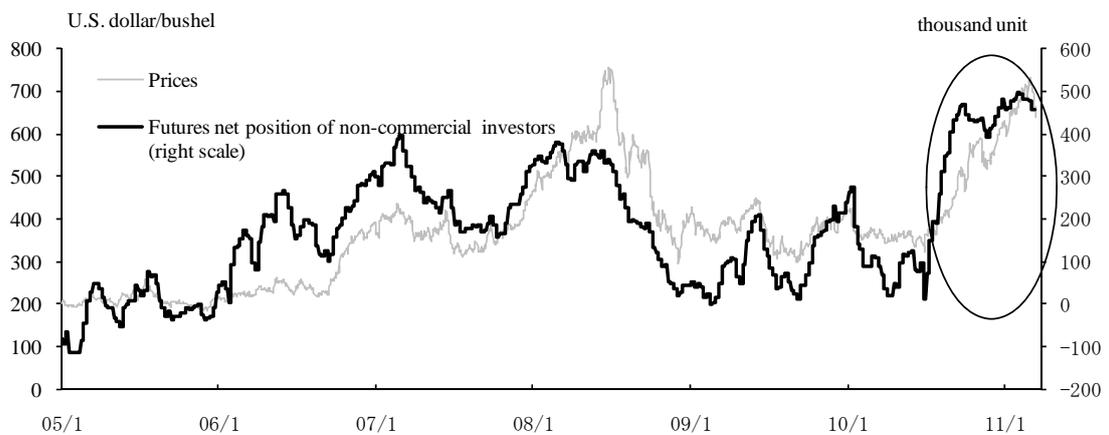


Note: Data for energy and crops belong to S&P GSCI sub indices.

B. WTI and futures net position



C. Corn prices and futures net position



Note: The latest data for net position of non-commercial investors are weekly data as of March 8. The latest data for commodity prices are as of March 15.

Source: Bloomberg.

Chart 10: Developments in China's Major Economic Indicators

y/y % chg.

	2009	2010	2010/3Q	4Q	2011/1Q	2010/Dec	2011/Jan	Feb
Real GDP	9.2	10.3	9.6	9.8				
Industrial production	11.1	16.3	14.2	13.9	14.1	14.0	13.3	14.9
Figures in <>: q/q chg.			< 2.4 >	< 3.9 >	< 3.6 >	< 1.4 >	< 0.4 >	< 3.6 >
Manufacturing PMI	52.9	53.8	52.2	54.6	52.6	53.9	52.9	52.2
Total retail sales of consumer goods	15.5	18.4	18.4	18.8	15.8	19.1	20.0	11.6
Fixed asset investment	30.5	24.5	23.1	24.9	24.9	21.8	N/A	N/A
Exports	-16.0	31.3	32.2	24.9	21.3	17.9	37.7	2.4
Figures in <>: q/q chg.			< 2.7 >	< 3.8 >	< 1.2 >	< -0.2 >	< 13.9 >	< -23.0 >
Imports	-11.2	38.7	27.2	29.6	36.0	25.7	51.0	19.4
Figures in <>: q/q chg.			< 3.6 >	< 10.2 >	< 12.3 >	< 2.2 >	< 20.0 >	< -16.9 >
CPI	-0.7	3.3	3.5	4.7	4.9	4.6	4.9	4.9
M2	27.7	19.7	19.0	19.7	15.7	19.7	17.2	15.7
Renminbi lending	31.7	19.9	18.5	19.9	17.7	19.9	18.5	17.7

- Notes: 1. The latest quarterly figures are calculated based on the average of released figures. Figures for M2 and renminbi lending are year-on-year changes from the quarter-end figures.  
 2. Seasonally adjusted figures for industrial production, exports, and imports are calculated by the BOJ.  
 3. For manufacturing PMI, figures above 50 indicate "improvement" and below 50 "deterioration." The data used are released by the China Federation of Logistics and Purchasing.  
 4. Figures for fixed asset investment are calculated by the BOJ using the year-to-date accumulation and year-on-year growth rates both released by the National Bureau of Statistics of China.  
 5. Due to the changes in collecting data, there is a data discontinuity between February 2010 and thereafter for industrial production and between 1Q 2011 and thereafter for fixed asset investment.

Chart 11: Developments in Real GDP in Major Asian Countries

s.a., ann., q/q % chg.; figures in parentheses: y/y % chg.

	2008	2009	2010	2009/4Q	2010/1Q	2Q	3Q	4Q
India	7.4	7.0	8.6	7.3 ( -0.7 )	8.6 ( 11.4 )	8.9 ( 9.9 )	8.9 ( 15.2 )	8.2 ( -2.8 )
South Korea	2.3	0.2	6.1	0.7 ( 6.0 )	8.8 ( 8.1 )	5.8 ( 7.2 )	3.0 ( 4.4 )	2.2 ( 4.8 )
Taiwan	0.7	-1.9	10.8	18.4 ( 9.2 )	18.9 ( 13.6 )	1.5 ( 12.9 )	3.2 ( 10.7 )	0.0 ( 6.9 )
Hong Kong	2.3	-2.7	6.8	9.0 ( 2.5 )	7.6 ( 8.1 )	6.9 ( 6.4 )	3.5 ( 6.7 )	6.1 ( 6.2 )
Singapore	1.5	-0.8	14.5	-1.5 ( 4.6 )	39.9 ( 16.4 )	29.7 ( 19.4 )	-16.7 ( 10.5 )	3.9 ( 12.0 )
Thailand	2.5	-2.3	7.8	15.4 ( 5.9 )	14.6 ( 12.0 )	-1.5 ( 9.2 )	-1.3 ( 6.6 )	4.8 ( 3.8 )
Indonesia	6.0	4.6	6.1	6.6 ( 5.4 )	5.6 ( 5.6 )	6.8 ( 6.1 )	4.2 ( 5.8 )	11.3 ( 6.9 )
Malaysia	4.7	-1.7	7.2	11.8 ( 4.4 )	6.7 ( 10.1 )	6.1 ( 8.9 )	-2.8 ( 5.3 )	9.4 ( 4.8 )
The Philippines	3.7	1.1	7.3	7.6 ( 2.1 )	16.1 ( 7.8 )	5.1 ( 8.2 )	-3.2 ( 6.3 )	12.7 ( 7.1 )

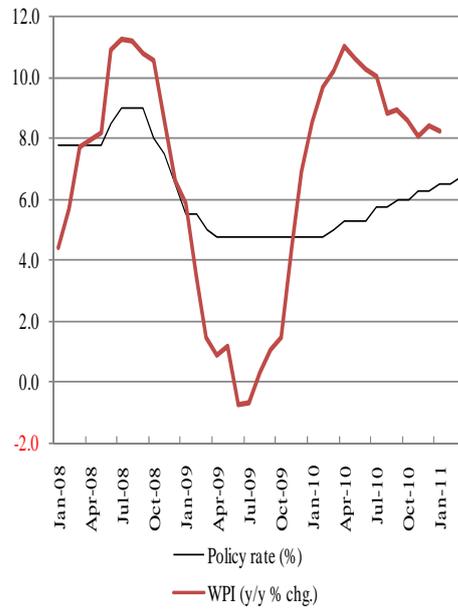
- Notes: 1. Seasonally adjusted figures for South Korea, Taiwan, Hong Kong, Singapore, Thailand, and the Philippines are obtained from the statistical authorities of those countries. Other countries' figures are calculated by the BOJ.  
 2. Annualized figures for real GDP are calculated by the BOJ.

Chart 12: Policy Rates and Inflation Developments in Asian Countries

A. China



B. India



C. South Korea

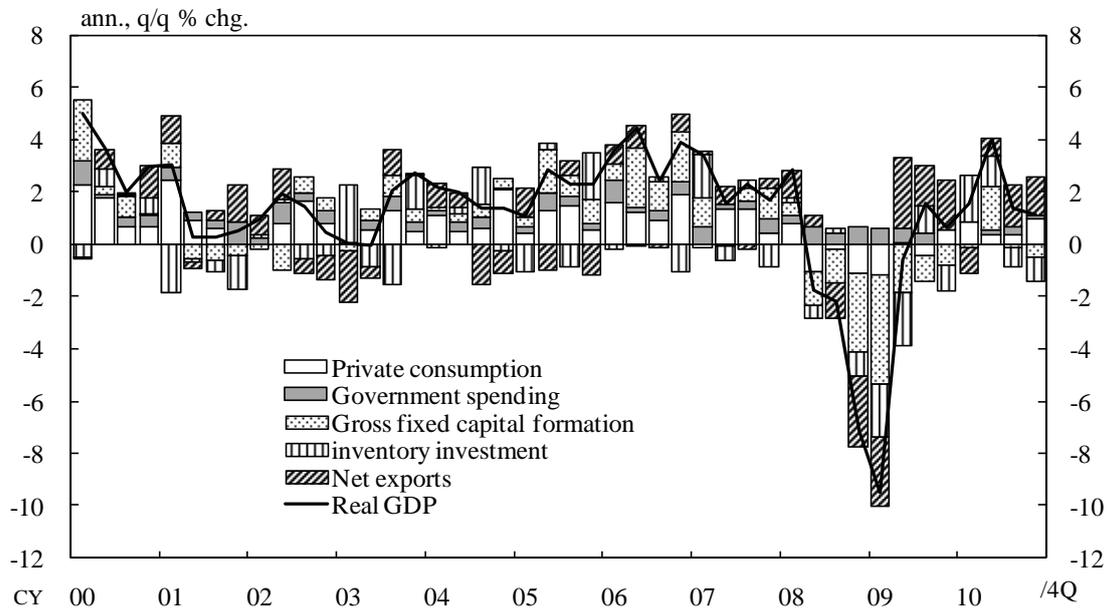


D. Thailand



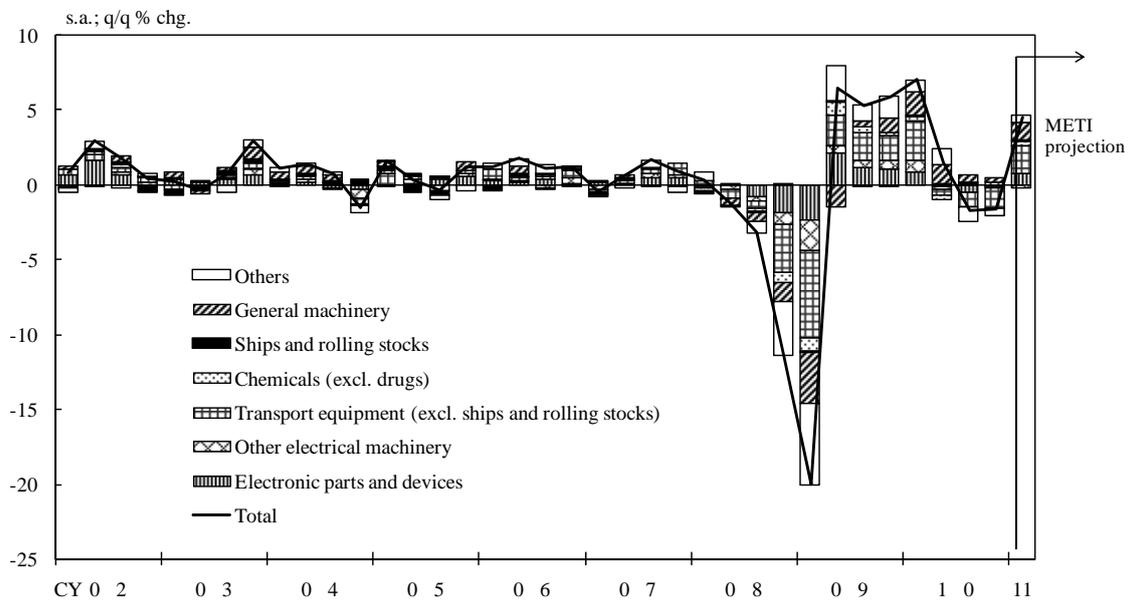
Source: Bloomberg.

Chart 13: Developments in Real GDP in the Euro Area



Source: Eurostat, "National Accounts."

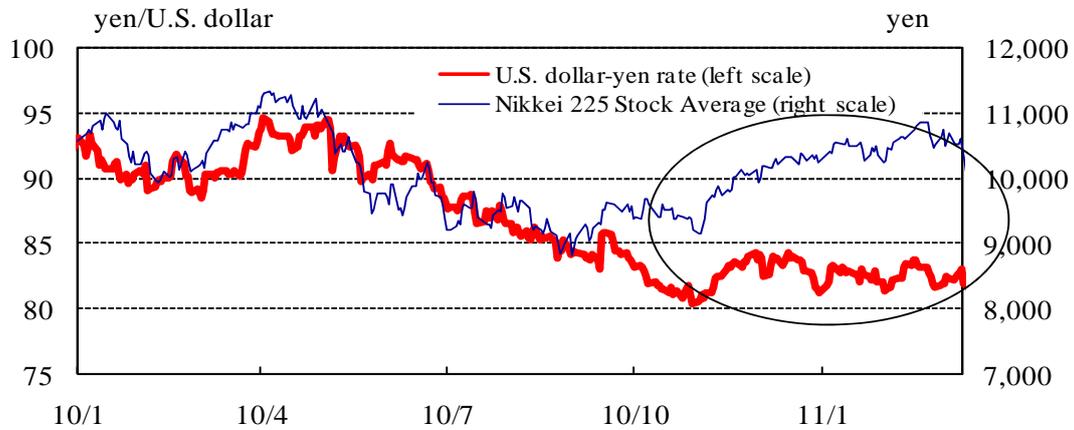
Chart 14: Developments in Japan's Industrial Production



- Notes: 1. "Other electrical machinery" is the weighted sum of "electrical machinery" and "information and communication electronics equipment."  
2. Figures up to 2003/Q1 are on the 2000 base. 2011/Q1 figures are based on the actual production levels in January, and the METI projection of February and March.

Source: Ministry of Economy, Trade and Industry, "Indices of Industrial Production."

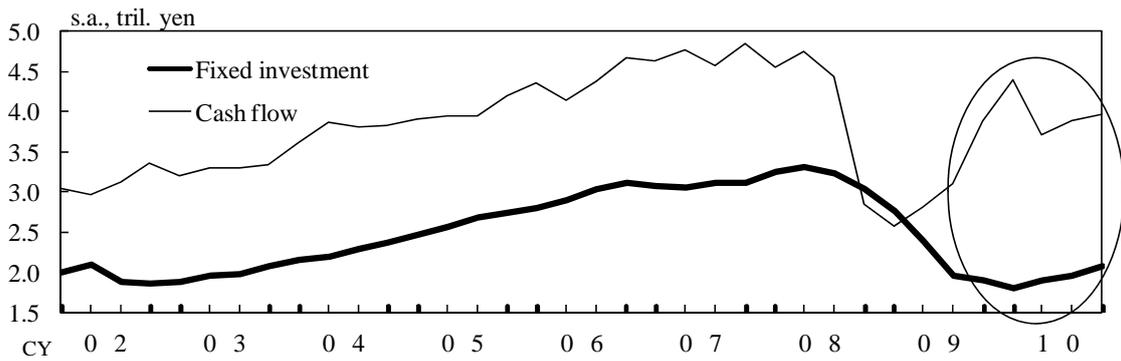
Chart 15: U.S. Dollar/Yen Exchange Rate and Nikkei 225 Stock Average



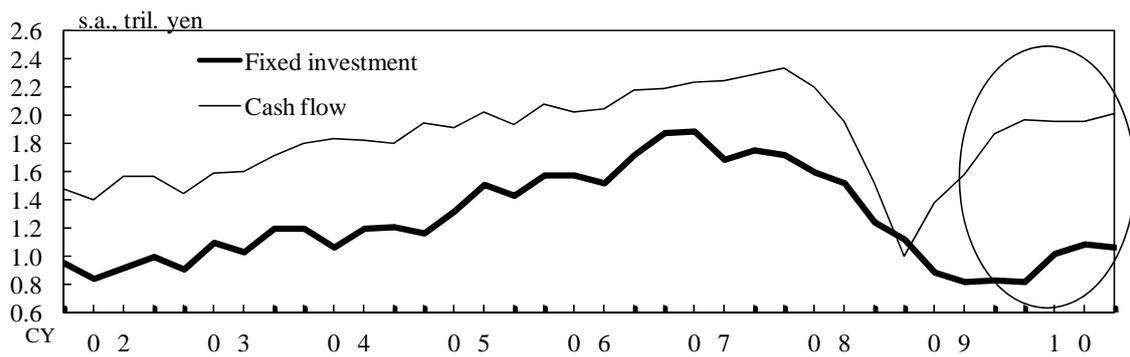
Source: Bloomberg.

Chart 16: Fixed Investment by Manufacturing Firms

A. Large firms



B. Medium-sized and small firms



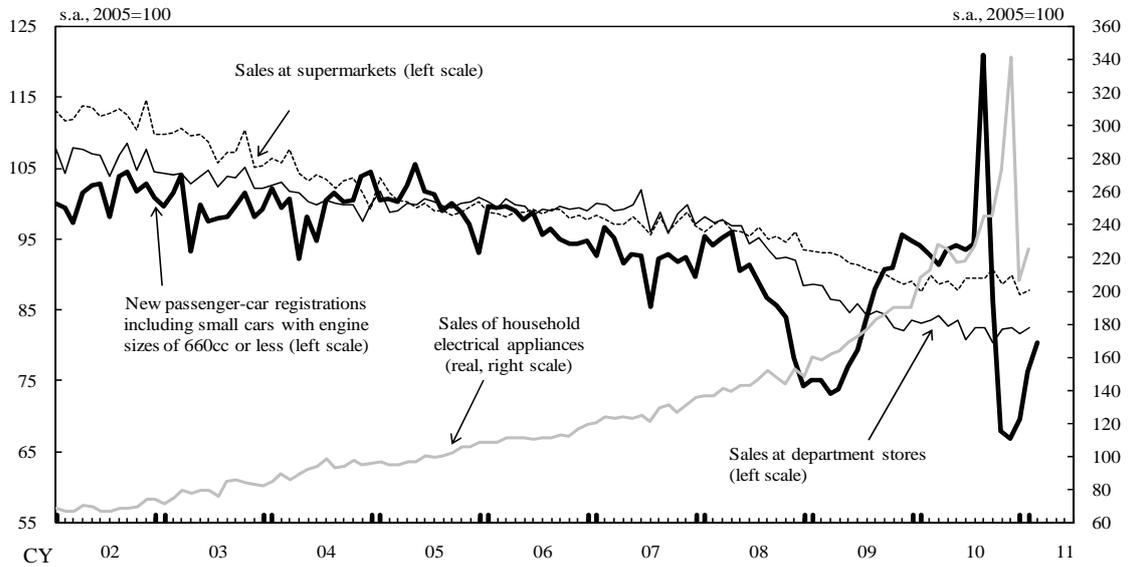
Notes: 1. "Large firms" refers to firms with capital stock of 1 billion yen or more, and "medium-sized and small firms" refers to firms with capital stock of 10 million or more but less than 1 billion yen.

2. Cash flow = current profits/2 + depreciation expenses.

3. Seasonally adjusted by X-11.

Source: Ministry of Finance, "Financial Statements Statistics of Corporations by Industry, Quarterly."

Chart 17: Indicators Related to Private Consumption in Japan

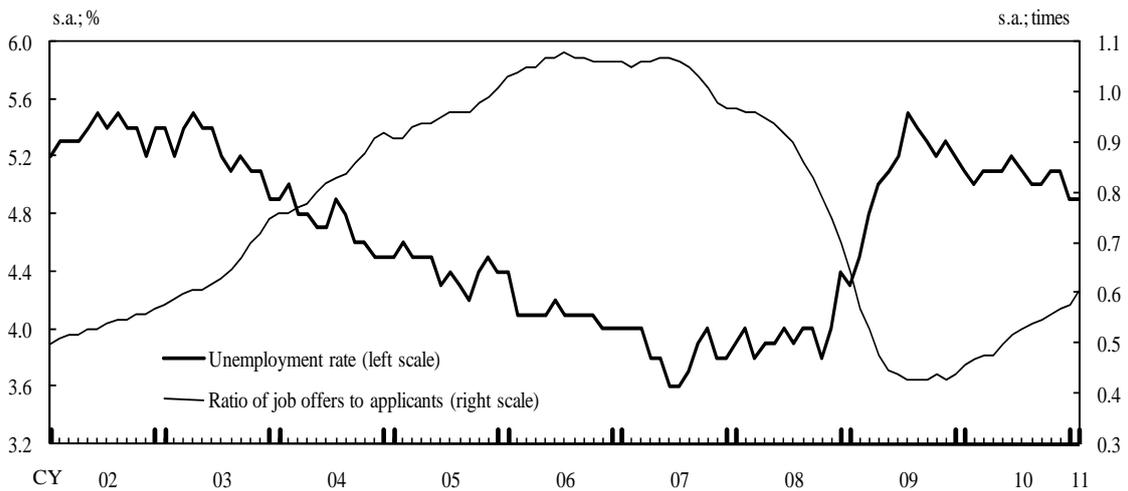


Note: "Sales of household electrical appliances" is calculated as follows: indices of retail sales of machinery and equipment in the "Current Survey of Commerce" are deflated by the geometric means of the corresponding CPI (or by the "corporate goods price index" for PC printers before 2002).

Sources: Ministry of Economy, Trade and Industry, "Current Survey of Commerce"; Japan Automobile Dealers Association, "Domestic Sales of Automobiles"; Japan Mini Vehicles Association, "Sales of Mini Vehicles," etc.

Chart 18: Indicators Related to Employment and Income in Japan

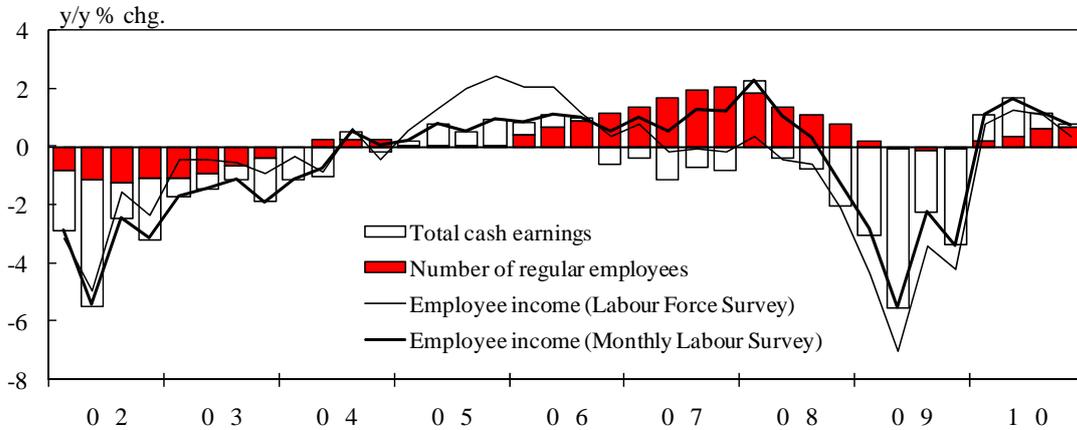
A. Unemployment rate and ratio of job offers to applicants



Note: Figures do not include jobs offered to new graduates, but include those offered to part-time workers.

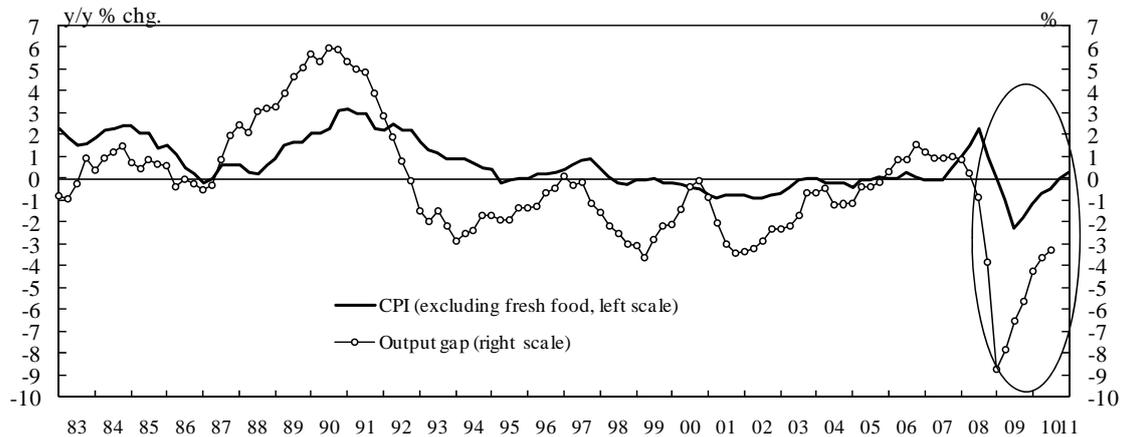
Sources: Ministry of Internal Affairs and Communications, "Labour Force Survey"; Ministry of Health, Labour and Welfare, "Report on Employment Service."

## B. Employee income



- Notes:
1. Data of the "Monthly Labour Survey" are for establishments with at least five employees.
  2. Q1 = March-May, Q2 = June-August, Q3 = September-November, Q4 = December-February.
  3. Employee income (Labour Force Survey) is calculated as the "number of regular employees" (Monthly Labour Survey) times "total cash earnings" (Monthly Labour Survey).
  4. Employee income (Monthly Labour Survey) is calculated as the "number of employees" (Labour Force Survey) times "total cash earnings" (Monthly Labour Survey).
  5. Figures for 2010/Q4 are December 2010 - January 2011 averages.
- Sources: Ministry of Health, Labour and Welfare, "Monthly Labour Survey"; Ministry of Internal Affairs and Communications, "Labour Force Survey."

### Chart 19: Japan's Output Gap and CPI



- Notes:
1. The year-on-year changes in the CPI are consumption-tax adjusted. Figures from April-June quarter exclude fresh food and high school tuition. The January-March figure is the January figure.
  2. Output gap is estimated by the BOJ's Research and Statistics Department. For details of the estimation method, see "The New Estimates of Output Gap and Potential Growth Rate," Bank of Japan Review Series, 2006-E-3.
- Source: Ministry of Internal Affairs and Communications, "Consumer Price Index."

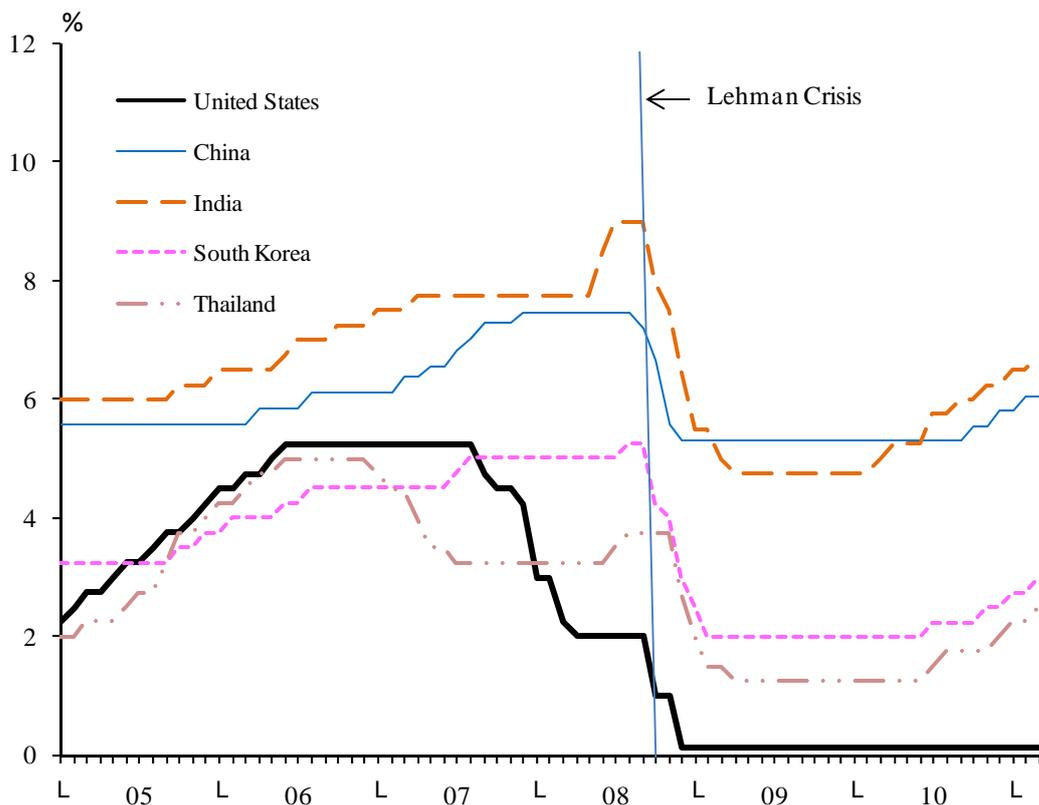
Chart 20: Transmission of Net Export Expansion to Gross Domestic Income

	Average growth rate [2002-2007]	Accumulated increase brought by net export expansion [2002-2007]
Real GDP (A)	1.8%	+23 trillion yen
Trading gains/losses (B)	—	-18.7 trillion yen
Real GDI (A+B)	1.2%	+4.3 trillion yen

Note: Real GDI represents gross domestic income.

Source: Cabinet Office, "National Accounts."

Chart 21: U.S. and Asian Policy Rates



Source: Bloomberg.