

# Japan Economics: Weekly Monitor

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## Chart of the week: Recovery in housing starts has stopped .....2

Housing starts for July was almost flat +0.1% mom after -1.3% in June. Housing starts have looked to finish its recovery phase since January of this year.

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Next week, the second preliminary GDP estimates for the April-June quarter (2Q), and the balance of payments for July will be released on the 8<sup>th</sup>.

Incorporating results of the 1Q MoF corporate survey, capex is expected to be revised up (from -1.5% to +0.8%), inventory contribution is likely to be downgraded (from -0.1pp to -0.5pp). Since those two effects would cancel out, we expect real GDP growth rate to remain unchanged from +0.2% qoq annualized.

Our estimates based on the customs-cleared trade statistics point to a seasonally adjusted current account surplus of about 1.63 trillion yen in July after 1.65 trillion yen in June.

## BoJ monetary policy meeting outlook .....5

The policy board of the BoJ is scheduled to review a report prepared by the staff on "comprehensive assessment" of QQE+NIRP at the next board meeting on 20-21 September. We have seen little to alter our view and continue to expect no additional surprise moves from the BoJ on 21 September.

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## Recent publications

[\*Japan Economic Adviser: We continue to expect no additional surprise moves from the BoJ on 21 September\*](#) (1 September 2016)

[\*Japan Economic Adviser: Income policies won't work\*](#) (22 August 2016)

[\*Japan Economic Adviser: BoJ Governor Kuroda suggests NIRP expansion remains an policy option\*](#) (22 August 2016)

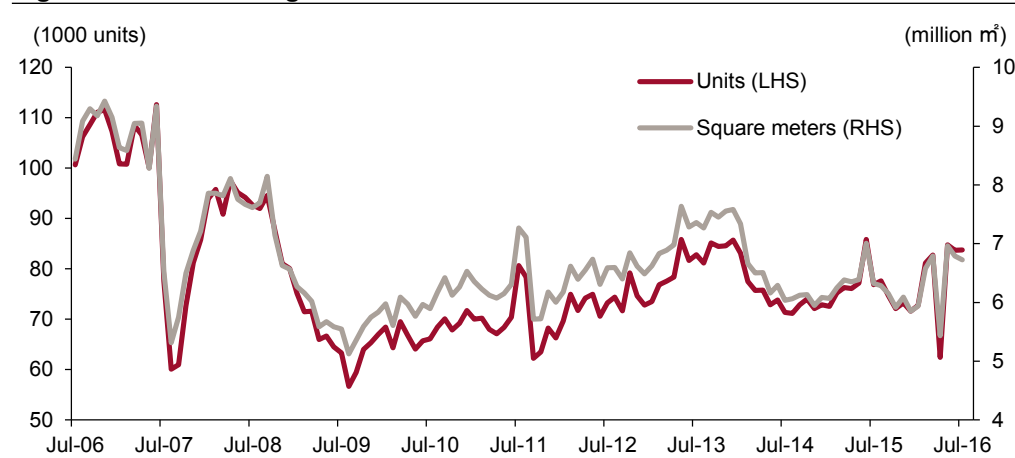
[\*Japan Economic Adviser: Balance of Payments Monitor \(August 2016\): Current account surplus above 3% of GDP for a fifth straight quarter\*](#) (18 August 2016)

[\*Japan Economic Adviser: Japan Inflation Watch \(August 2016\): Quite limited impact on our inflation forecast from the stimulus package\*](#) (17 August 2016)

## Chart of the week: Recovery in housing starts has stopped

Housing starts for July were almost flat at +0.1% mom after -1.3% in June. Housing starts have looked to finish its recovery phase since January of this year. The amount of housing construction orders in July, which are used for estimating housing investment in the GDP statistics, were -0.2% lower than the Apr-Jun average.

**Figure 1: New Housing Started**



Source: MLIT, Credit Suisse

## The week ahead

Next week, the second preliminary GDP estimates for the April-June quarter (2Q), and the balance of payments for July will be released on the 8<sup>th</sup>.

### GDP 2<sup>nd</sup> prelim (Apr-Jun) forecast: 0.2 (qoq%, ann)

Thursday, September 8  
8:50

Incorporating results of the 1Q MoF corporate survey, capex is expected to be revised up (from -1.5% to +0.8%), inventory contribution is likely to be downgraded (from -0.1pp to -0.5pp). Since those two effects would cancel out, we expect the real GDP growth rate to remain unchanged from +0.2% qoq annualized.

**Figure 2: GDP results (1<sup>st</sup> preliminary estimates)**

%, pp, \* contribution

	QoQ, SA, annualized			
	15Q3	15Q4	16Q1	16Q2(1 <sup>st</sup> )
Real GDP	2.0	-1.7	2.0	0.2
Private consumption	1.8	-3.2	2.8	0.6
Housing investment	4.3	-1.8	-0.5	21.3
Capex	3.0	4.8	-2.7	-1.5
Private inventory(*)	-0.4	-0.7	-0.4	-0.1
Government consumption	1.0	3.1	3.6	0.9
Public investment	-7.5	-12.5	0.4	9.5
Net export(*)	0.8	0.2	0.5	-1.0
Export	10.6	-3.7	0.4	-5.9
Import	4.9	-4.2	-2.1	-0.3
Real GDP (yoy, %)	1.8	0.7	0.2	0.6
Nominal GDP (yoy%)	3.6	2.2	1.1	1.3
GDP deflator (yoy%)	1.8	1.5	0.9	0.8

Source: Cabinet Office, METI, Credit Suisse

### Balance of Payments (July) forecast: 1.63 trillion yen

Thursday, September 8  
8:50

Our estimates based on the customs-cleared trade statistics point to a seasonally adjusted current account surplus of about 1.63 trillion yen in July after 1.65 trillion yen in June. While the trade balance is expected to show a somewhat narrower surplus of about 400 billion yen after 470 billion yen surplus, the income balance (1.41 trillion yen surpluses) will likely shrink due to yen appreciation.

**Figure 3: Current account balance**

Monthly, seasonally adjusted, ¥100mn



Source: MoF, Credit Suisse

**Figure 4: Key data and events**

		Indicator	CS Est.	Consensus	Prior
Sep 5 (Mon)	9:00	Monthly Labor Survey (Jul) - Total cash earnings (yoy%)	--	0.5	1.4
Sep 7 (wed)	14:00	Indexes of Business Conditions (Jul, prelim) - Leading CI	--	98.6	99.2
		- Coincident CI	--	111.7	111.1
Sep 8 (Thu)	8:50	GDP (Apr - Jun, 2nd prelim) - Real GDP (qoq%, annualized)	0.2	0.1	0.2
	8:50	Balance of Payments (Jul) - Current account (sa, ¥ tn)	1.63	1.61	1.65
	8:50	Bank Lending (Aug) (yoy%)	--	--	2.1
	14:00	Economy Watchers Survey (Aug) - DI for current economic conditions	--	--	45.1
Sep 9 (Fri)	8:50	Money Stock (Aug) - M2 (yoy%)	--	3.3	3.3
		- Broadly Defined Liquidity (yoy%)	--	--	1.7
	13:30	Tertiary Industry Index (Jul) (mom%)	--	0.4	0.8

Source: BoJ, Cabinet Office, Ministry of Public Management, Home Affairs, Posts and Telecommunications, MoF, METI, MHLT, MLIT, the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

## BoJ monetary policy meeting outlook

The policy board of the BoJ is scheduled to discuss and review a report prepared by the staff on "comprehensive assessment" of the QQE+NIRP at the next board meeting on 20-21 September. We have seen little to alter our view and continue to expect no additional surprise moves from the BoJ on 21 September.

The bank is likely to essentially make positive assessments for the QQE+NIRP, and therefore, we don't see a high probability of the policy review laying a platform for further action of a "ground-breaking" nature such as JGB underwriting and foreign security buying. If the BoJ indeed assesses its policy efforts in a generally favorable light without expressing material "remorse", then we see little scope for "radical innovation".

The BoJ is expected to argue that the NIRP has helped to stimulate borrowing and investment while also alleviating problems pertaining to the "zero lower bound", shrugging off the latest criticism by the financial industry that the policy is weighing on banks' profitability. It is likely for the Bank to continue to see room for the marginal (Tier 3) policy rate to be lowered deeper into negative territory. We therefore think that expansion of the NIRP will be the most likely next action by the BoJ while we think that a small and temporary upgrade to the JGB purchase amount is possible as well.

The Bank is foreseen to point out importance of recognizing the fact that the central bank cannot simply keep expanding its balance sheet without limit. We expect the board to argue that greater attention may therefore need to be paid to the sustainability of BoJ asset purchases in the medium term. In relating to this, our anticipation is that the BoJ may declare its consideration of introducing a new monetary policy framework in which asset purchases are made more sustainable over a longer run and re-anchoring of inflation expectations are more secured.

**Figure 5: Credit Suisse expectations for BoJ monetary policy meetings in 2016**

PRB denotes Policy-rate balance (the third tier balance), O: a likely action under base cases, Δ: a possible action under risk cases

Dates for CY2016	Outlook report	Credit Suisse expectations for each policy action									
		Monetary base target upgrade	JGB purchase upgrade	JGB targeted maturity upgrade	EQ ETF purchase upgrade	J-REIT purchase upgrade	CB/CP purchase upgrade	Reduction in the rate on PRB	Reduction in the loan rate	Easing of collateral standards	Other asset purchase
Apr 27-28	yes	—	—	—	—	—	—	—	—	—	—
Jun 15-16		—	—	—	—	—	—	—	—	—	—
Jul 28-29	yes	—	—	—	Increased	—	—	—	—	—	—
Sep 20-21											
Oct 31-Nov 1	yes		Δ					O	O		Δ
Dec 19-20											

Source: BoJ, Credit Suisse

# Calendar

Mon	Tue	Wed	Thu	Fri
8/29	30	31	9/1	2
8:50 Input-Output Price Index of MFG (Jul) Output/Input Ratio Index (yoy%) -8.4 / -5.5	8:30 Household Survey (Jul) Real expenditures (mom%, sa) 2.5 8:30 Unemployment Rate (Jul) (%) 3.0 8:30 Effective-Job-Offers-to-Job-Seekers Ratio (Jul) (X) 1.37 8:50 Retail Sales (Jul, prelim) (yoy%) -0.2	8:50 Industrial Production (Jul, prelim) (mom%): 0.0 14:00 New Housing Starts (Jul) (yoy%) 8.9	8:50 MOF Corporate Survey (Q2) All Industry Investment (exclude software, qoq%) -0.5	8:50 Monetary Base (Aug) (yoy%) 24.2 14:00 Consumer Confidence Survey (Aug)
9/5	6	7	8	9
9:00 Monthly Labor Survey (Jul)		14:00 Indexes of Business Conditions (Jul, prelim)	8:50 GDP (Apr - Jun, 2nd prelim) Real GDP (qoq%, annualized) CS forecast: 0.2 8:50 Balance of Payments (Jul) Current account (sa, ¥ tn) CS forecast: 1.63 8:50 Bank Lending (Aug) 14:00 Economy Watchers Survey (Aug)	8:50 Money Stock (Aug) 13:30 Tertiary Industry Index (Jul)
9/12	13	14	15	16
8:50 Machinery Orders (Jul) 8:50 Corporate Goods Price Index (Aug, prelim)	8:50 Business Outlook Survey (Q3)	1:30 Industrial Production (Jul, final)		
9/19	20	21	22	23
		8:50 Trade Balance (Aug) BOJ Monetary Policy Meeting		13:30 All Industry Activity Index (Jul)
9/26	27	28	29	30
8:50 Flow of funds (Q2 prelim)	8:50 Services Producer Price Index (Aug) 8:50 Minutes of the Monetary Policy Meeting (Jul 28-29)		8:50 Input-Output Price Index of MFG (Aug) 8:50 Retail Sales (Aug, prelim)	8:30 Consumer Price Index (Tokyo: Sep, Nationwide Aug) 8:30 Household Survey (Aug) 8:30 Unemployment Rate (Aug) 8:30 Effective-Job-Offers-to-Job-Seekers Ratio (Aug) 8:50 Industrial Production (Aug, prelim) 14:00 New Housing Starts (Aug)

Source: BoJ, Cabinet Office, Ministry of Public Management, Home Affairs, Posts and Telecommunications, MoF, METI, MHLW, MLIT, Credit Suisse

# Japan economic forecasts

**Figure 6: As of 2 September 2016**

		2015				2016				2017				FY				CY			
		Q1	Q2	Q3	Q4	Q1	Q2E	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E	14	15	16E	17E	14	15	16E	17E
Real GDP qoq% annualized	Real GDP	4.9	-1.7	2.0	-1.7	2.0	0.2	0.6	0.4	0.5	0.8	0.7	0.7	-0.9	0.8	0.5	0.7	0.0	0.5	0.5	0.6
	Private consumption	0.2	-2.6	1.8	-3.2	2.8	0.6	1.2	1.0	0.5	1.0	0.4	0.5	-2.9	-0.2	0.7	0.7	-0.9	-1.2	0.5	0.8
	Private residential investment	11.0	7.0	4.3	-1.8	-0.5	21.3	1.4	1.0	0.0	-1.0	-2.0	1.0	-11.7	2.4	5.3	-0.2	-5.3	-2.5	4.4	1.2
	Private non-residential investment	12.7	-3.5	3.0	4.8	-2.7	0.8	-1.0	-1.0	0.5	-1.0	0.5	1.0	0.1	2.1	-0.5	-0.1	3.1	1.5	-0.1	-0.3
	Private inventory (contribution)	2.5	1.3	-0.4	-0.7	-0.4	-0.5	-0.3	-0.4	0.0	0.0	0.1	0.0	0.6	0.3	-0.3	0.2	0.2	0.6	-0.2	0.1
	Government consumption	1.1	1.3	1.0	3.1	3.6	0.9	1.5	1.5	1.5	1.5	1.5	1.5	0.1	1.6	1.9	1.5	0.1	1.2	2.1	1.5
	Public investment	-6.0	4.9	-7.5	-12.5	0.4	9.5	0.4	1.0	3.0	10.0	8.0	5.0	-2.6	-2.7	1.0	5.4	0.4	-2.5	-1.2	4.7
	Net exports (contribution)	0.4	-1.6	0.8	0.2	0.5	-1.0	0.0	0.0	-0.3	-0.3	-0.3	-0.3	0.6	0.1	-0.1	-0.2	0.0	0.4	0.0	-0.3
	Exports	6.9	-15.8	10.6	-3.7	0.4	-5.9	1.0	1.0	0.0	-3.0	-2.0	0.0	7.9	0.4	-1.0	-0.9	8.3	2.8	-1.4	-0.9
	Imports	4.3	-6.8	4.9	-4.2	-2.1	-0.3	1.0	1.0	2.0	-1.0	0.0	2.0	3.4	0.0	-0.3	0.6	7.2	0.3	-1.0	0.7
Real GDP (yoy%)		-1.0	0.7	1.8	0.7	0.2	0.6	0.3	0.8	0.4	0.6	0.6	0.7	-0.9	0.8	0.5	0.7	0.0	0.6	0.5	0.6
Nominal GDP (yoy%)		2.2	2.2	3.6	2.2	1.1	0.8	-0.7	-0.5	-1.6	-1.9	-0.6	-0.7	1.5	2.2	-0.4	-0.9	1.6	2.6	0.3	-1.2
Industrial production (yoy%)		-2.3	-0.8	-0.9	-0.8	-1.6	-1.8	-0.2	-0.7	-0.5	0.3	-0.3	-0.3	-0.5	-1.0	-0.8	-0.1	2.2	-1.2	-1.1	-0.2
Industrial production (qoq%)		1.1	-1.3	-1.0	0.0	-1.0	0.2	0.3	0.2	0.1	-0.3	-0.2	0.1	-	-	-	-	-	-	-	-
CPI (core, yoy%)		2.3	0.3	-0.2	-0.1	-0.1	-0.4	-0.4	-0.4	-0.1	0.0	0.0	0.2	2.9	0.0	-0.3	0.1	2.7	0.6	-0.3	0.0
CPI (core, ex. VAT, yoy%)		0.3	0.2	-0.2	-0.1	-0.1	-0.4	-0.4	-0.4	-0.1	-0.3	0.0	0.2	0.9	0.0	-0.3	0.0	1.2	0.0	-0.3	0.0
CPI (ex. food, energy and VAT, yoy%)		0.4	0.5	0.8	0.8	0.7	0.6	0.4	0.3	0.2	0.1	-0.1	-0.1	0.5	0.7	0.4	0.0	0.6	0.6	0.5	0.0
Unemployment rate (%)		3.5	3.4	3.4	3.3	3.2	3.2	3.2	3.1	3.0	3.0	3.0	3.0	3.5	3.3	3.1	3.0	3.6	3.4	3.2	3.0
Trade service balance to GDP (%)		-0.7	-0.7	-0.4	0.0	0.7	0.7	0.0	-0.2	-0.6	-0.9	-1.2	-1.4	-1.9	-0.1	0.0	-1.3	-2.8	-0.5	0.3	-1.0
Current account balance to GDP (%)		2.9	3.2	3.2	3.8	4.0	3.7	2.9	2.7	2.3	1.8	1.6	1.2	1.8	3.5	2.9	1.4	0.8	3.3	3.3	1.7
Fiscal balance to GDP (%)		-	-	-	-	-	-	-	-	-	-	-	-	-5.2	-4.4	-5.1	-5.4	-	-	-	-
IOER (%)		0.10	0.10	0.10	0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	0.10	-0.10	-0.10	-0.10	0.10	0.10	-0.10	-0.10
10yr JGB yields		0.41	0.47	0.36	0.27	-0.03	-0.22	-0.10	0.00	0.10	0.10	0.10	0.10	0.41	-0.03	0.10	0.20	0.33	0.27	0.00	0.10
USD/JPY		119.2	121.4	122.2	121.4	115.2	108.0	100.0	98.3	96.7	95.0	95.0	95.0	119.2	115.2	96.7	95.0	114.5	121.4	98.3	95.0

Notes: IOER, JGB yields, and USD/JPY are end of period data, while USD/JPY is average over period.  
Source: Cabinet Office, MoF, METI, Statistics Bureau, Credit Suisse estimates

## JGB yield forecasts and JGB auction schedule

**Figure 7: JGB yield forecasts**

	2yr	5yr	7yr	10yr	20yr	30yr
2016/09/30	-0.23	-0.22	-0.22	-0.10	0.26	0.36
2016/12/31	-0.13	-0.12	-0.12	0.00	0.36	0.46
2017/03/31	-0.03	-0.02	-0.02	0.10	0.46	0.56
2017/06/30	-0.03	-0.02	-0.02	0.10	0.46	0.56
2017/09/30	-0.03	-0.02	-0.02	0.10	0.46	0.56
2017/12/31	-0.03	-0.02	-0.02	0.10	0.46	0.56
2018/03/31	0.07	0.08	0.08	0.20	0.56	0.66

Source: Credit Suisse

**Figure 8: JGB auction schedule**

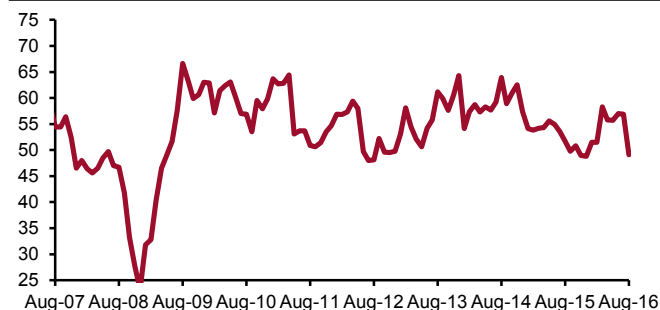
2016/09/06	(Tue)	30y	2016/10/18	(Tue)	1y T-bill
2016/09/07	(Wed)	6m T-bill	2016/10/18	(Tue)	Enhanced liquidity
2016/09/08	(Thu)	3m T-bill	2016/10/20	(Thu)	3m T-bill
2016/09/08	(Thu)	5y	2016/10/20	(Thu)	Enhanced liquidity
2016/09/13	(Tue)	20y	2016/10/25	(Tue)	20y
2016/09/14	(Wed)	1y T-bill	2016/10/27	(Thu)	3m T-bill
2016/09/15	(Thu)	3m T-bill	2016/10/27	(Thu)	2y
2016/09/15	(Thu)	Enhanced liquidity	2016/11/02	(Wed)	3m T-bill
2016/09/20	(Tue)	3m T-bill	2016/11/02	(Wed)	Enhanced liquidity
2016/09/23	(Fri)	Enhanced liquidity	2016/11/08	(Tue)	6m T-bill
2016/09/27	(Tue)	40y	2016/11/08	(Tue)	10y
2016/09/29	(Thu)	3m T-bill	2016/11/10	(Thu)	3m T-bill
2016/09/29	(Thu)	2y	2016/11/10	(Thu)	30y
2016/10/04	(Tue)	10y	2016/11/15	(Tue)	5y
2016/10/05	(Wed)	6m T-bill	2016/11/16	(Wed)	1y T-bill
2016/10/06	(Thu)	3m T-bill	2016/11/17	(Thu)	3m T-bill
2016/10/06	(Thu)	10y CPI linker	2016/11/17	(Thu)	20y
2016/10/12	(Wed)	2m T-bill	2016/11/22	(Tue)	Enhanced liquidity
2016/10/12	(Wed)	30y	2016/11/24	(Thu)	3m T-bill
2016/10/13	(Thu)	3m T-bill	2016/11/25	(Fri)	40y
2016/10/14	(Fri)	5y	2016/11/29	(Tue)	2y

Source: MoF, Credit Suisse



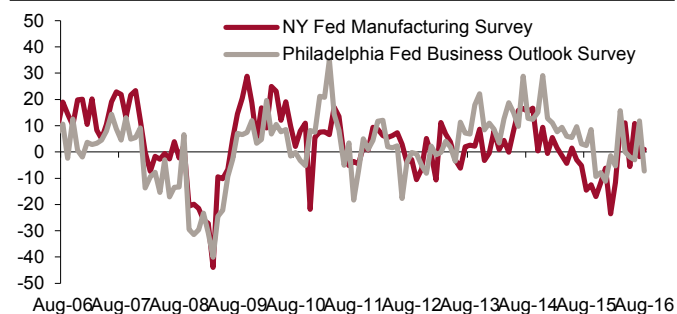
## Major indicator charts and tables

**Figure 9: US manuf. ISM survey new order index**



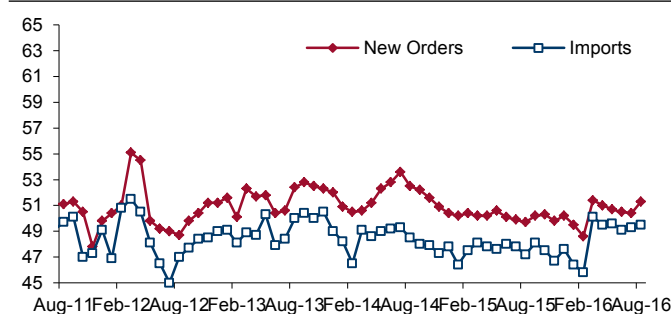
Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

**Figure 10: Manufacturing survey new order index**



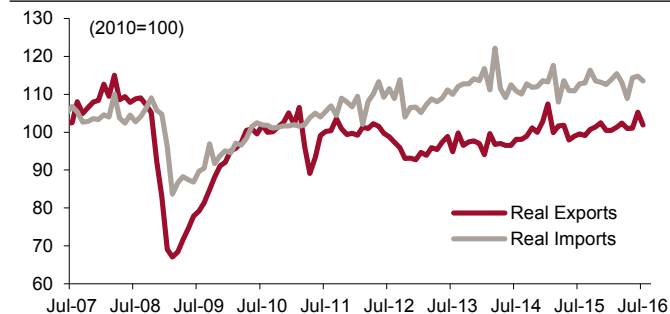
Source: NY Fed, Philadelphia Fed, Credit Suisse

**Figure 11: China PMI manuf. survey**



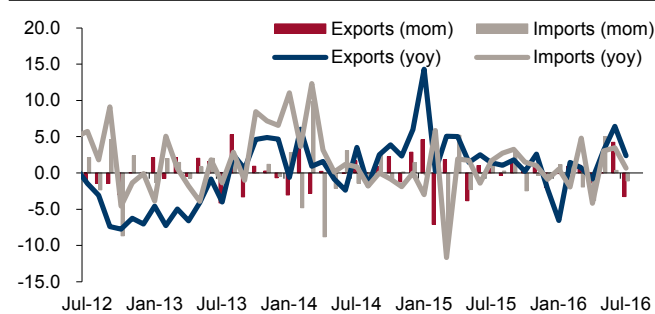
Source: Thomson Reuters Datastream, Credit Suisse

**Figure 12: Real trade indices**



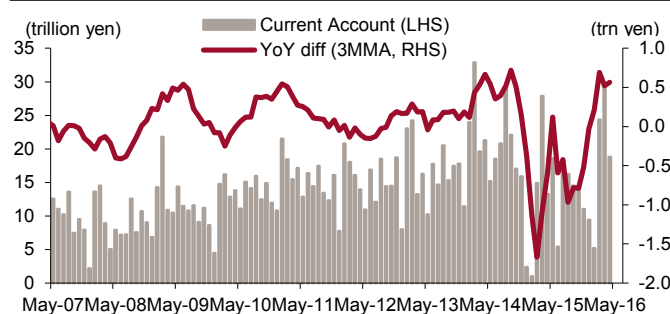
Source: BoJ, Credit Suisse

**Figure 13: Customs-cleared trade indices**



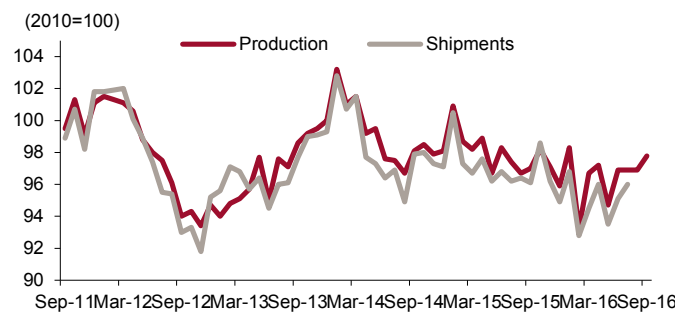
Source: MoF, Credit Suisse

**Figure 14: Current account balance**



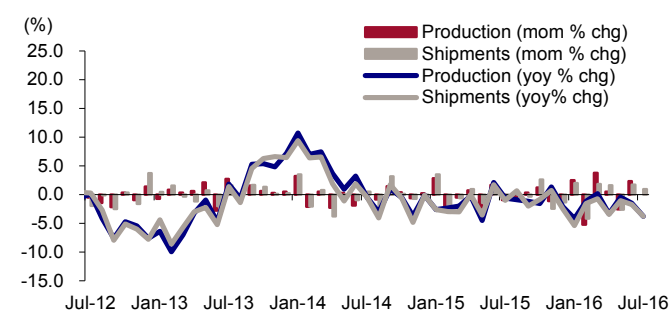
Source: BoJ, Credit Suisse

**Figure 15: Industrial production and shipments**

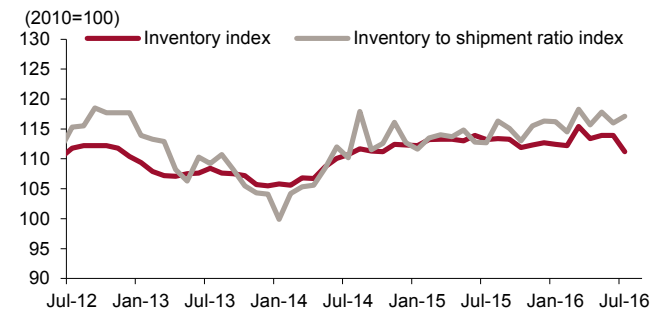
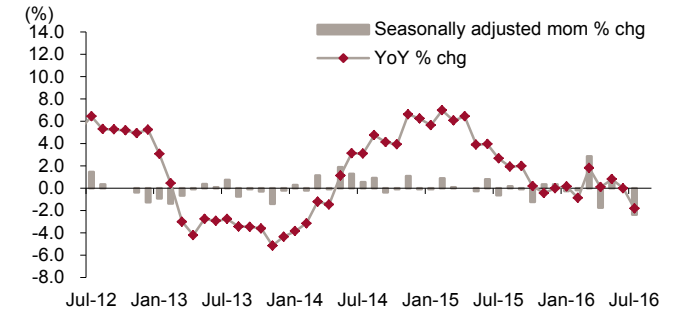
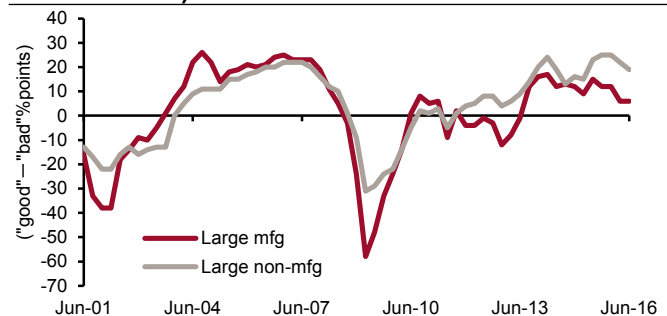
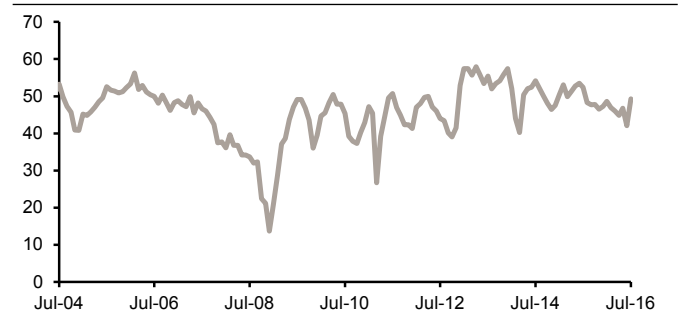
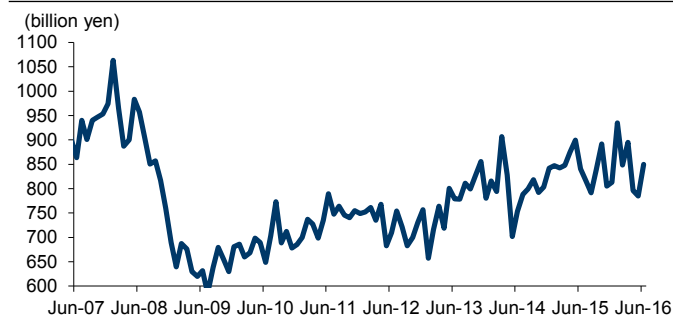
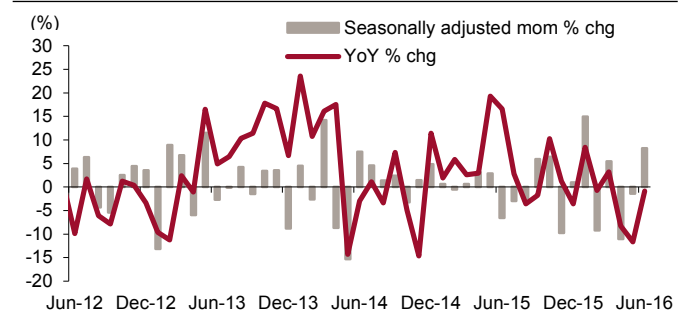
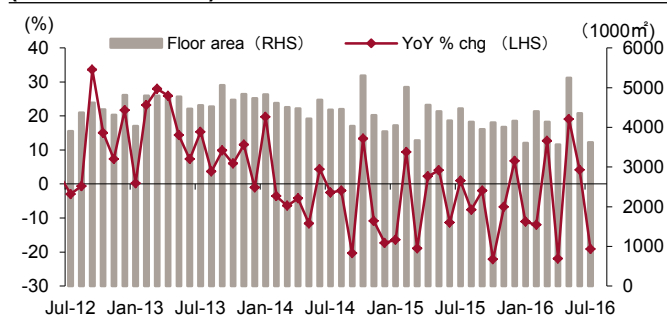
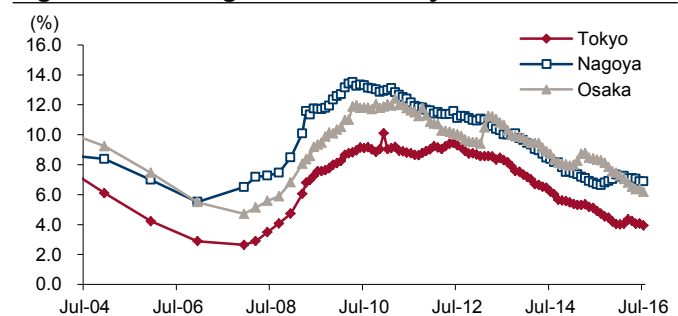


Note: Production data in August and September are METI's forecasts.  
Source: METI, Credit Suisse

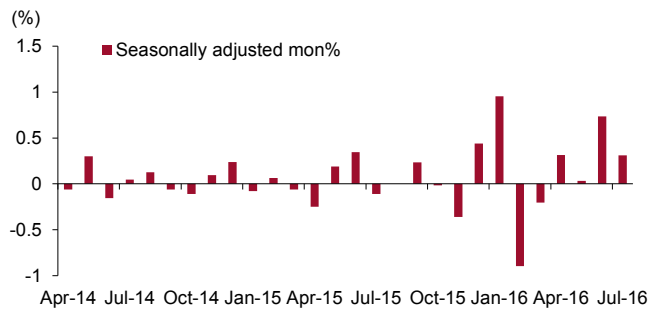
**Figure 16: Industrial production and shipments (2)**



Source: METI, Credit Suisse

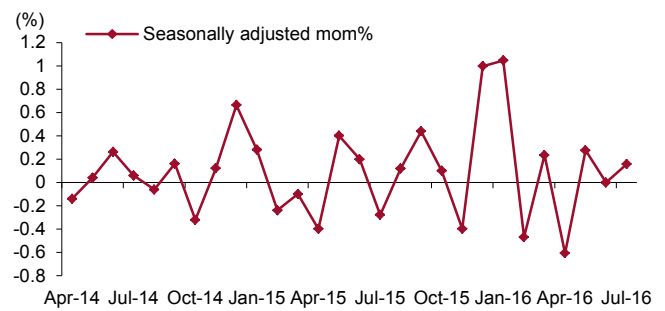
**Figure 17: Industrial inventory index and inventory to shipment ratio****Figure 18: Industrial inventory changes****Figure 19: BoJ Tankan Survey (business conditions DI)****Figure 20: Business Watchers' Survey for manufacturers****Figure 21: Core machinery orders (1)****Figure 22: Core machinery orders (2)****Figure 23: Floor area of construction started (non-residential)****Figure 24: Average office vacancy rates**

**Figure 25: Changes in the number of workers**



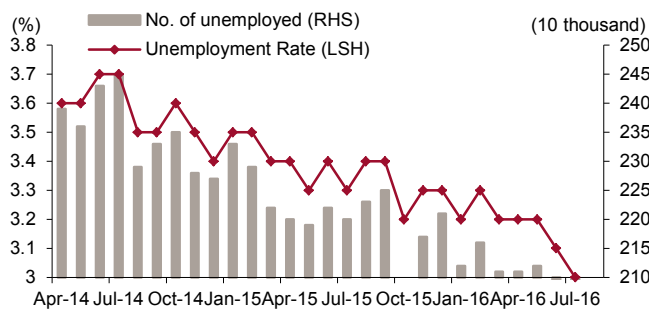
Source: MIC, Credit Suisse

**Figure 26: Changes in the non-farm payroll number**



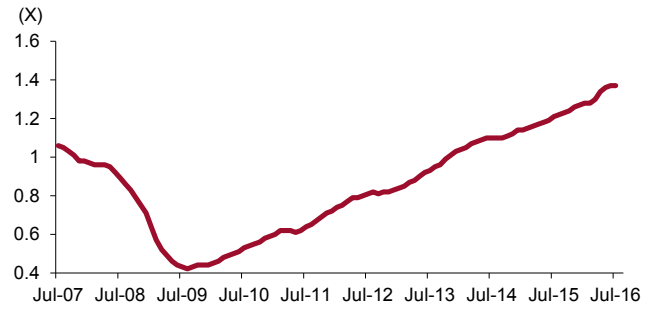
Source: MIC, Credit Suisse

**Figure 27: Unemployment rate**



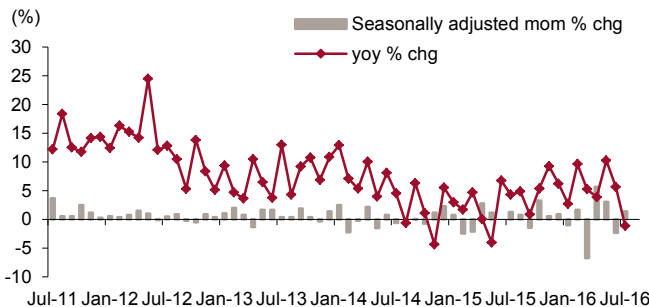
Source: MIC, Credit Suisse

**Figure 28: Job offers to applicants ratio**



Source: MLHS, Credit Suisse

**Figure 29: New job offers (including part-time employees)**



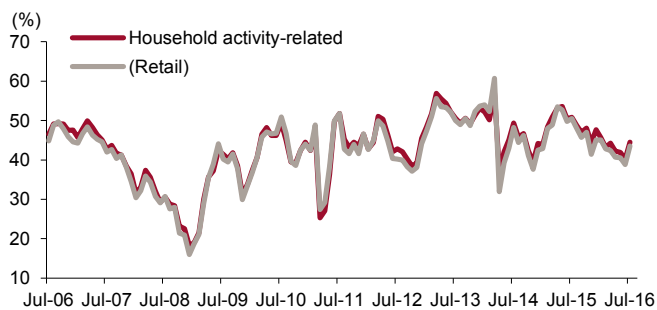
Source: MHLT, Credit Suisse

**Figure 30: Consumer Sentiment Index**



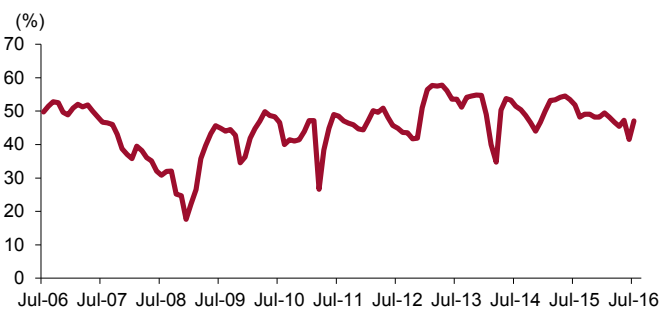
Note: Data before Jun 2012 are old base.  
Source: Cabinet Office, Credit Suisse

**Figure 31: Business Watchers' Survey – current business conditions DI for households**

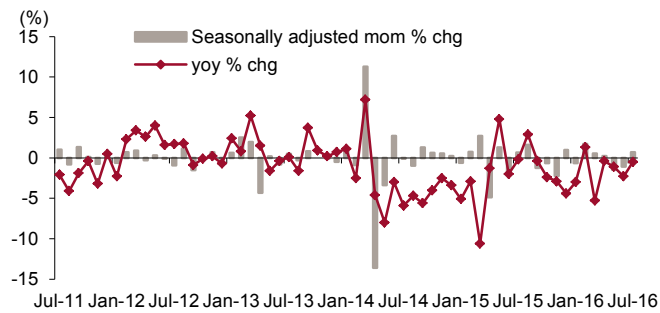


Source: Cabinet Office, Credit Suisse

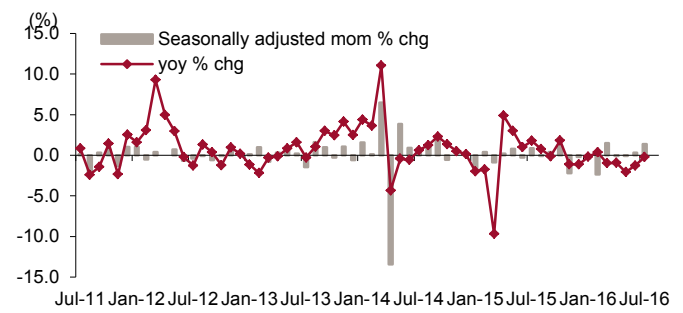
**Figure 32: Business Watchers' Survey –future business conditions DI for households**



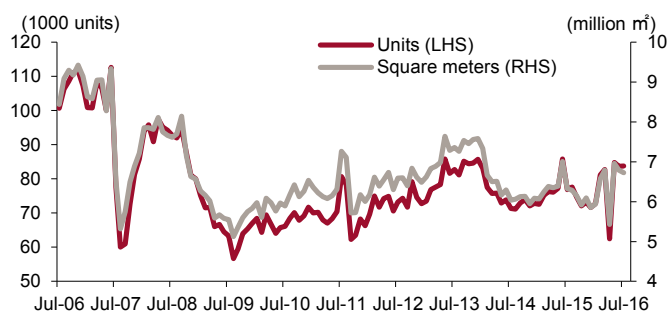
Source: Cabinet Office, Credit Suisse

**Figure 33: Real household spending**

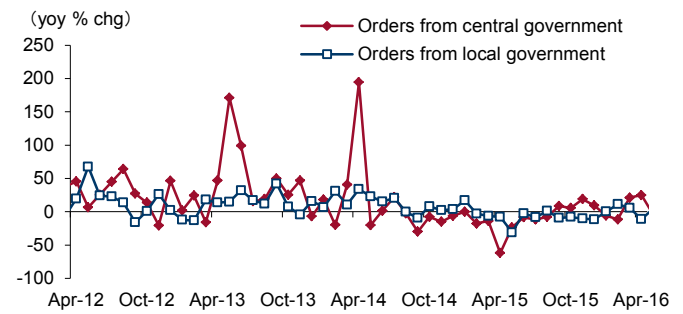
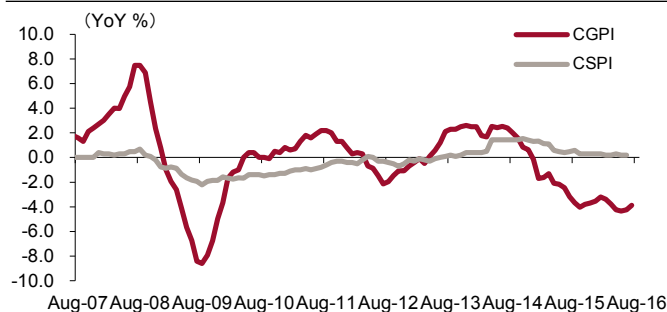
Source: Miki Shoji, Credit Suisse

**Figure 34: Retail sales**

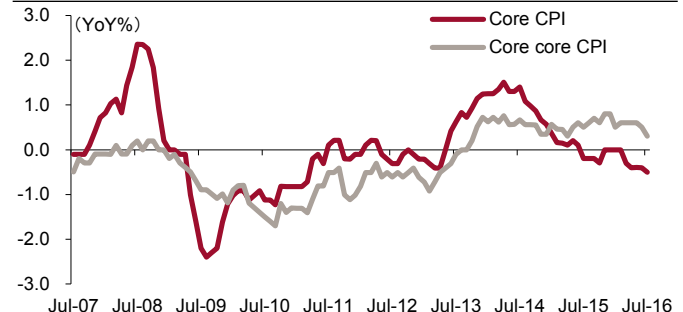
Source: METI, Credit Suisse

**Figure 35: New housing started**

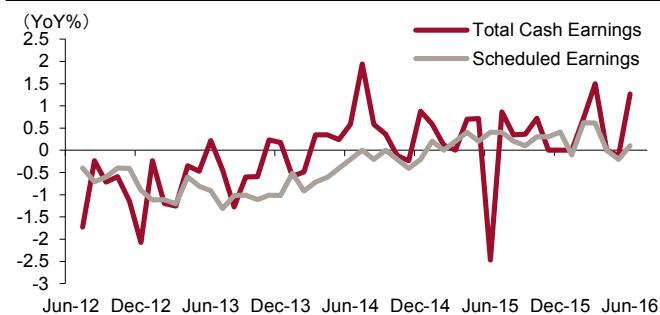
Source: MLIT, Credit Suisse

**Figure 36: Construction orders from public sector**Note: Quarterly base, but monthly base for 2009.  
Source: MLIT, Credit Suisse**Figure 37: Corporate prices**

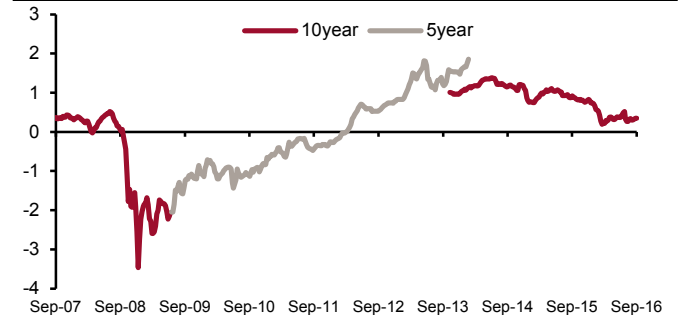
Source: BoJ, Credit Suisse

**Figure 38: CPI**

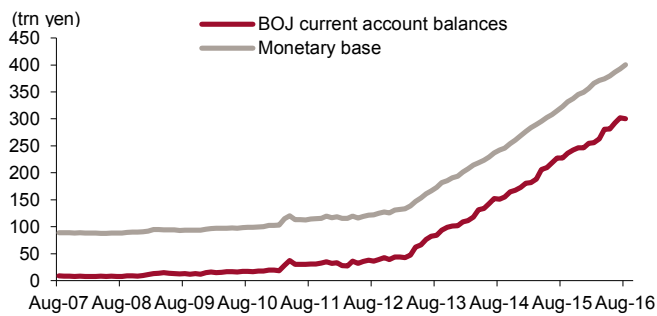
Source: MIC, Credit Suisse

**Figure 39: Nominal wage indices**

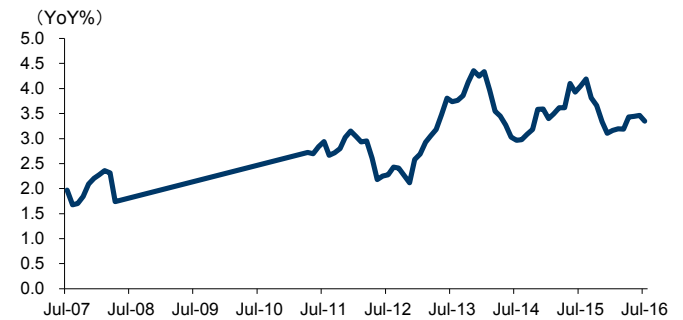
Source: MHLW, Credit Suisse

**Figure 40: Break-even inflation rates**

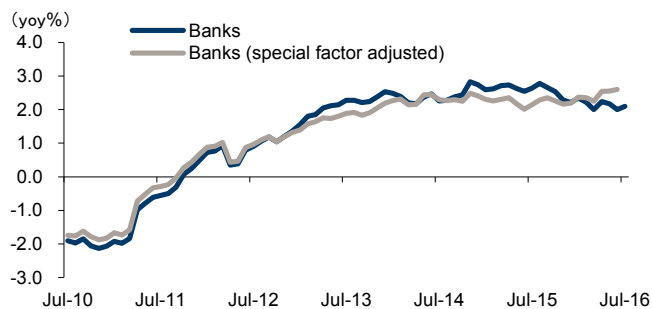
Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

**Figure 41: Monetary base**

Source: BoJ, Credit Suisse

**Figure 42: Money stock (M2)**

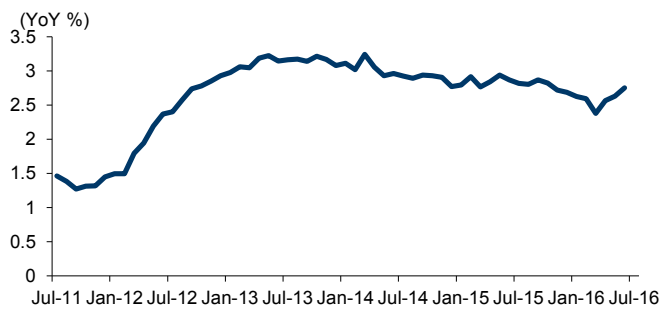
Source: BoJ, Credit Suisse

**Figure 43: Average outstanding bank lending (banks and shinkin banks)**

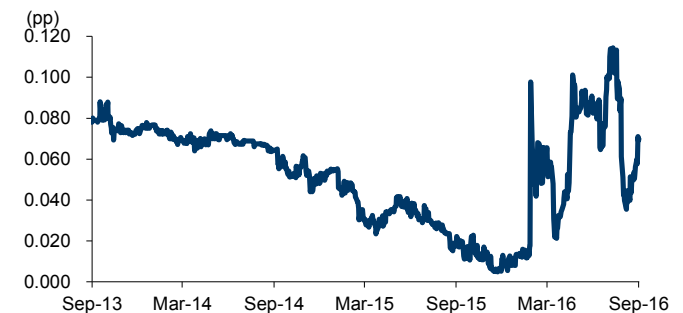
Source: BoJ, Credit Suisse

**Figure 44: Outstanding bank lending (domestic banking accounts)**

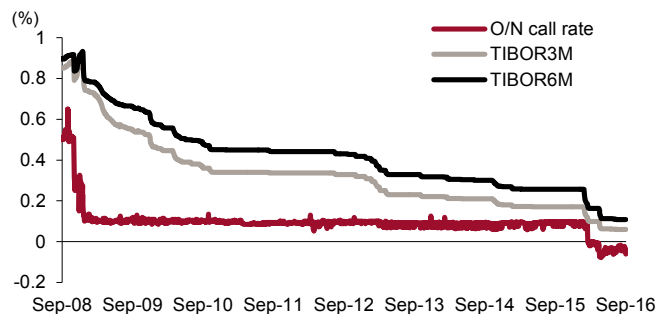
Source: BoJ, Credit Suisse

**Figure 45: Bank lending to household sector**

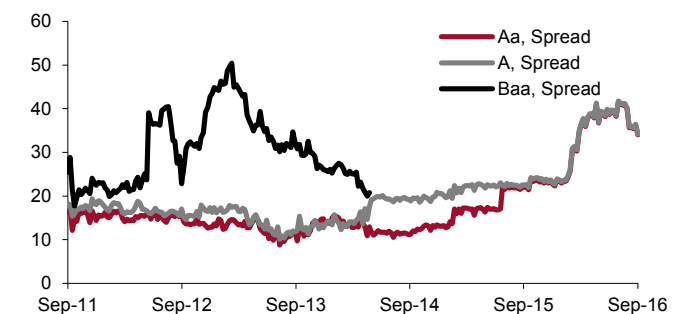
Source: BoJ, Credit Suisse

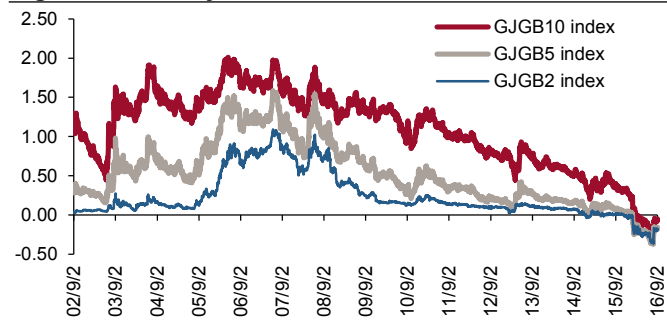
**Figure 46: LIBOR-OIS spread (3-month)**

Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

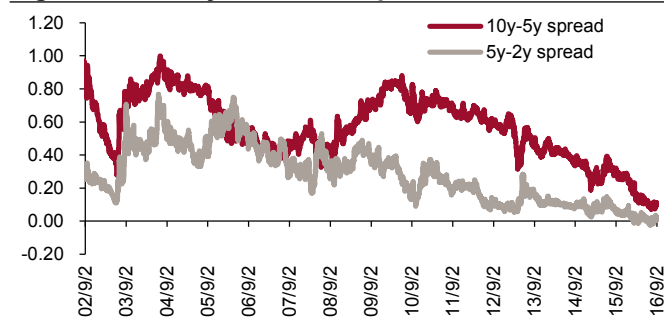
**Figure 47: Money market rates**

Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

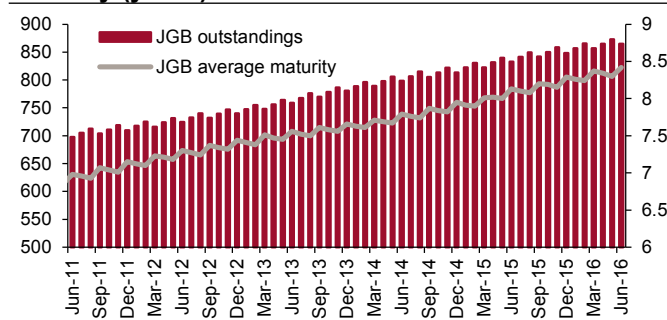
**Figure 48: Credit spreads**Note: Credit spreads are calculated using the Bloomberg Fair Market Value index and JGB5Y yields.  
Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

**Figure 49: JGB yields**

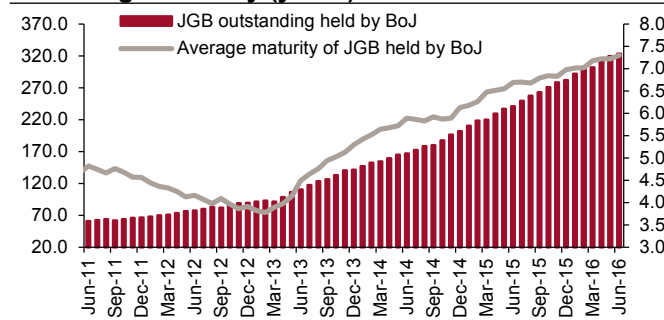
Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

**Figure 50: JGB yields, term spreads**

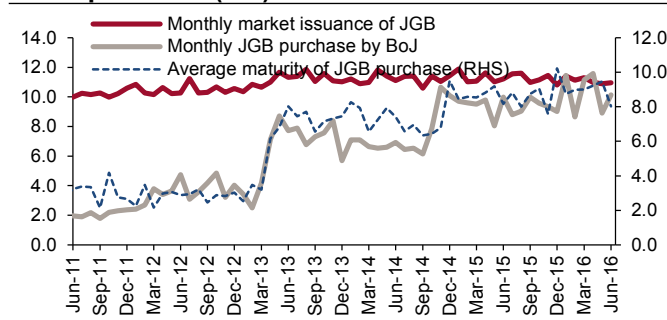
Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

**Figure 51: JGB outstanding (¥tn) and average maturity (years)**

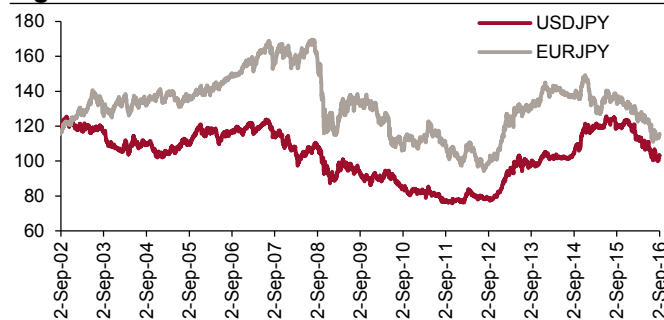
Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

**Figure 52: JGB outstanding held by BoJ (¥tn) and its average maturity (years)**

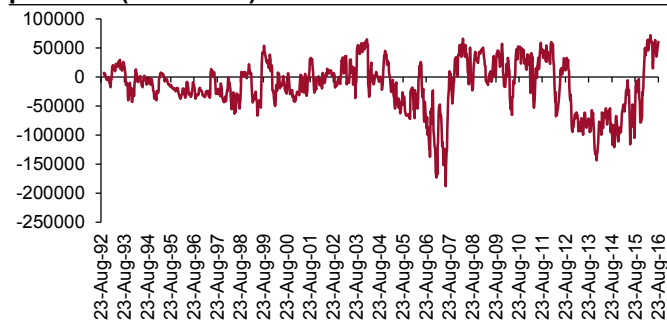
Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

**Figure 53: Monthly market issuance of JGB and BoJ's purchase (¥tn)**

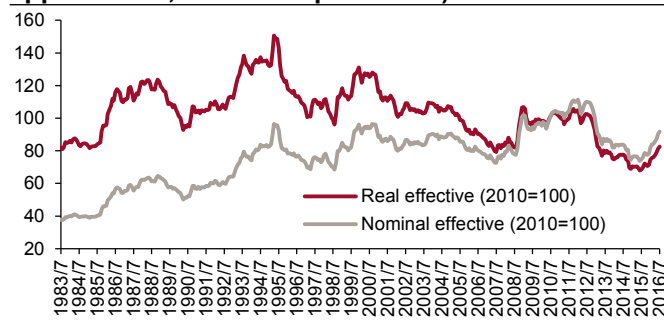
Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

**Figure 54: USDJPY and EURJPY**

Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

**Figure 55: CME JPY net non-commercial future position (contracts)**

Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

**Figure 56: Effective FX rate index (2010 = 100, up = appreciation, down = depreciation)**

Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

Figure 57: Major indicators

		2015/12	2016/01	2016/02	2016/03	2016/04	2016/05	2016/06	2016/07	2016/08
Consumption-related indicators										
Real spending by all households	YoY %	-4.4	-3.0	1.3	-5.3	-0.4	-1.1	-2.3	<b>-0.5</b>	
Real spending by wage-earners	YoY %	-5.0	-2.5	1.9	-4.9	1.4	-2.8	-5.2	<b>-3.5</b>	
Real disposable income	YoY %	-3.1	-0.8	-3.3	1.3	1.2	-3.9	1.8	<b>-0.4</b>	
Average propensity to consume	YoY %	72.9	72.3	74.6	71.5	74.2	75.2	69.4	<b>69.3</b>	
Department store sales	YoY %	-0.1	-2.1	-0.2	-3.0	-3.9	-5.3	-3.7	-0.2	
Super store sales	YoY %	-0.7	1.6	2.4	-2.3	-2.1	-1.9	-1.4	-0.9	
Convenience store sales	YoY %	4.4	4.1	6.9	2.9	4.1	2.3	3.5	3.5	
Household activity-related DI	YoY pts	3.5	1.7	-5.2	-6.6	-11.0	-11.7	-10.2	-6.3	
Consumer sentiment index	MoM pts	0.2	-0.3	-2.2	1.6	-0.9	0.1	0.9	-0.5	
Monthly wages	YoY %	0.0	0.0	0.7	1.5	0.0	-0.1	1.4		
Real monthly wages	YoY %	-0.2	0.0	0.3	1.6	0.4	0.4	2.0		
Labor market conditions										
Unemployment rate	s.a. %	3.3	3.2	3.3	3.2	3.2	3.2	3.1	3.0	
# of workers	s.a. MoM 10k	28	61	-58	-13	20	2	47	20	
# of unemployed	s.a. MoM 10k	221	212	216	211	211	212	208	201	
# of non-labor force	s.a. MoM 10k	-31	-43	47	22	-23	0	-48	-12	
Job offers to applicants ratio	s.a.	1.27	1.28	1.28	1.30	1.34	1.36	1.37	1.37	
Job offers	s.a. MoM %	1.4	-1.6	1.3	-0.4	1.5	0.3	0.4	0.7	
Job seekers	s.a. MoM %	0.2	-2.1	1.2	-1.7	-1.8	-0.9	-0.4	0.4	
New job seekers	s.a. MoM %	0.9	-1.0	1.7	-6.7	5.7	3.1	-2.3	1.4	
Corporate-related indicators										
Industrial production										
Production	s.a. MoM %	-1.2	2.5	-5.2	3.8	0.5	-2.6	2.3	<b>0.0</b>	
Production	YoY %	-2.1	-4.2	-1.2	0.2	-3.3	-0.4	-1.5	<b>-3.8</b>	
Shipments	YoY %	-2.5	-5.4	-1.6	-0.7	-3.4	-1.0	-1.7	<b>-3.8</b>	
Inventory	YoY %	0.0	0.2	-0.9	1.8	0.1	0.8	0.0	<b>-1.8</b>	
Inventory to sales ratio	s.a.(2005=100)	116.3	116.2	114.5	118.3	115.7	117.8	116.0	<b>117.1</b>	
Manufacturers' operating ratio	s.a.(2005=100)	97.2	99.9	94.5	97.5	96.5	94.2	95.6		
Machinery orders										
Core machinery orders	s.a. MoM %	1.0	15.0	-9.2	5.5	-11.0	-1.4	8.3		
	YoY %	-3.6	8.4	-0.7	3.2	-8.2	-11.7	-0.9		
Foreign demands	s.a. MoM %	-2.2	-29.4	6.3	28.5	-6.9	-14.8	10.8		
	YoY %	5.7	-31.2	-31.2	-0.4	-2.0	-20.8	-16.8		
New housing starts	YoY %	-1.3	0.2	7.8	8.4	9.0	9.8	-2.5	8.9	
	s.a. annualized, 10k	86.0	87.3	97.4	99.3	99.5	101.7	100.4	100.5	
Construction starts (floor)	YoY %	6.7	-11.1	-12.0	12.7	-22.0	19.0	4.2	-19.1	
	s.a. MoM %	3.8	-13.4	22.2	-6.0	-14.0	47.2	-17.1	-16.8	

\* Contracted rate is the number of contracts sold divided by the number of units for sale.

Source: MIAC, Department Store Assoc., Chain Store Assoc., Convenience Store Assoc., Cabinet Office, MHLW, METI, MLIT, MoF, BoJ, JREI, Credit Suisse

Figure 58: Major indicators (continued)

		2015/12	2016/01	2016/02	2016/03	2016/04	2016/05	2016/06	2016/07	2016/08
Contracted rate for condominiums										
Tokyo metropolitan area	%	64.8	58.6	72.9	67.6	66.4	70.9	69.6	63.3	
Kinki area	%	59.6	67.1	72.0	78.6	70.0	64.5	73.3	74.6	
Prices										
Nationwide core CPI	YoY %	0.1	0.0	0.0	-0.3	-0.4	-0.4	-0.4	-0.5	
Tokyo core CPI	YoY %	0.1	-0.1	0.0	-0.1	-0.3	-0.4	-0.3	-0.4	-0.4
Domestic CGPI	YoY %	-3.5	-3.2	-3.4	-3.8	-4.2	-4.3	-4.2	-3.9	
Raw materials	YoY %	-32.3	-31.0	-29.7	-31.5	-27.7	-26.8	-29.1	-25.5	
Intermediate goods	YoY %	-6.2	-6.0	-6.2	-7.0	-7.8	-8.1	-8.5	-7.8	
Final goods	YoY %	-0.5	-1.0	-1.5	-2.1	-2.7	-3.1	-3.7	-3.7	
CSPI	YoY %	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.4	
External demand										
Trade balance	billion yen	138.9	-647.7	239.9	749.1	820.7	-42.9	690.7	513.6	
Exports	YoY %	-8.0	-12.9	-4.0	-6.8	-10.1	-11.3	-7.4	-14.0	
Imports	YoY %	-18.0	-17.8	-14.2	-14.9	-23.3	-13.7	-18.7	-24.7	
Trade volume										
Exports	YoY %	-4.4	-9.1	0.2	-1.0	-4.6	-2.4	3.1	-2.4	
Imports	YoY %	-5.0	-5.0	-2.4	5.2	-7.5	3.6	0.4	-4.0	
Real trade										
Exports	s.a. MoM %	-2.0	-0.1	0.9	1.1	-1.4	0.0	4.2	-3.2	
Imports	s.a. MoM %	-0.5	1.1	1.3	-2.0	-3.8	5.0	0.4	-1.1	
Balance of payments										
Current account balance	billion yen	940.1	590.1	2,387.4	2,986.2	1,878.5	1,809.1	974.4		
Current account balance	s.a. billion yen	1,645.8	1,436.1	1,636.1	1,900.7	1,625.8	1,414.5	1,648.4		
Trade and services	billion yen	-4.0	-617.8	567.6	1,145.1	295.9	157.4	596.0		
Trade balance	billion yen	194.3	-431.6	402.3	882.8	697.1	39.9	763.6		
Service balance	billion yen	-198.3	-186.2	165.3	262.3	-401.2	117.4	-167.6		
Income accounts	billion yen	1,013.6	1,337.0	2,015.4	2,164.3	1,780.5	1,898.2	417.5		
Financial balance	billion yen	1,416.1	765.0	3,010.7	5,238.0	1,479.3	4,099.4	1,447.8		
Direct investment	billion yen	1,323.5	1,020.0	1,273.1	1,132.1	1,034.8	575.6	337.5		
Portfolio investment	billion yen	746.4	1,176.0	9,553.4	9,466.6	-5,301.1	6,678.2	3,014.4		
Changes in reserve assets	billion yen	-151.6	179.0	105.3	-266.3	-29.2	207.7	-265.9		
Business conditions indices										
Coincident CI	MoM %	-1.3	0.7	-2.4	0.8	1.7	-2.3	1.8		
Leading CI	MoM %	-1.2	0.3	-2.0	-0.2	0.9	-0.3	0.8		

\* Contracted rate is the number of contracts sold divided by the number of units for sale.

Source: MIAC, Department Store Assoc., Chain Store Assoc., Convenience Store Assoc., Cabinet Office, MHLW, METI, MLIT, MoF, BoJ, JREI, Credit Suisse



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## Disclosure Appendix

## Analyst Certification

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